

March 27, 2014

## Pathways to Prosperity: New Hanover County's Plan for Jobs and Investment

Prepared for the  
New Hanover County Commission/City of Wilmington Economic Development Strategy Steering Committee





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OVERVIEW



In August 2013, The New Hanover County Commission retained Garner Economics, LLC to conduct an economic development strategy that builds on the County’s rich natural, cultural, and historical resources. With this strategy, Garner Economics has developed an action plan to help New Hanover County strengthen existing industries and identify emerging ones to increase private investment, job creation and retention.

The process to build the *Pathways to Prosperity* strategy is described in Figure 1. Together, the three phases provide:

- (1) A comprehensive and holistic assessment of key forces driving the New Hanover economy and shifting dynamics;
- (2) An Assets and Challenges Assessment (A&C) of the County from the eyes of a site location consultant that facilitates investment decisions;
- (3) Recommended business targets suitable for New Hanover County; and finally,

- (4) A set of implementable recommendations that the County can utilize to enhance the economic well-being of the area, strengthen its desirability as a business location, and mitigate current challenges.

The end result, *Pathways to Prosperity: New Hanover County’s Plan for Jobs and Investment*, is a road map that will help New Hanover County strengthen the area’s business climate and assist the area in increasing its economic competitiveness. For the County, this will mean taking on stronger leadership roles in economic development (as well as placing an emphasis on economic development) so that the area has the tools and product it needs to position itself well against peer regions and, therefore, can attract the types of high-quality jobs its citizens seek. *Pathways to Prosperity* will help the County (and other economic development partners and stakeholders) set forth a realistic economic vision for the area and, in doing so, identify and market to emerging industries that are an optimal fit. The plan will ensure that New Hanover County fully leverages its assets to create an environment where cutting-edge companies and world-class talent want to locate.

FIGURE 1: PROJECT PHASES & METHODOLOGY

Phase I: Discovery	Phase II: Strategy	Phase III: Implementation Recommendations
Evaluate New Hanover County’s competitive position from an economic development perspective <ul style="list-style-type: none"><li>Economic Analysis</li><li>Labor Analysis</li><li>Assets and Challenges Assessment (A&amp;C)</li><li>Cluster Analysis/Business Target Identification</li><li>Publication of the <i>Competitive Realities Report</i></li></ul> Solicit public input through focus groups and stakeholder interviews	Position New Hanover County to achieve success based on qualitative and quantitative analysis collected in Phase I <ul style="list-style-type: none"><li>Short- and long-term strategies for sustainable economic development</li><li>Business recruitment and marketing strategies</li><li>Product improvement (community development) strategies based on sustaining and growing a competitive advantage</li></ul>	High-level implementation plans for actionable items including: <ul style="list-style-type: none"><li>Marketing and promotion (messaging to the targeted industry sectors)</li><li>Talent development recommendations</li><li>Organizational recommendations for best practice service delivery in economic development for New Hanover County</li></ul> Presentation of the final report

## CHAPTER 1: WHERE NEW HANOVER COUNTY STANDS AS A PLACE FOR BUSINESS

### A SUMMARY OF THE COMPETITIVE REALITIES REPORT

Grounded by decades of economic development, site location analysis, and industry cluster targeting experience, Garner Economics began the project by using a rigorous set of techniques based on fully sourced and reliable data sets to completely understand the current economic state of New Hanover County.

The resulting *Competitive Realities Report* (CRR) was the first of two reports provided to New Hanover County on December 30, 2013 and summarized below. The CRR is a compilation of local facts and data points with quantitative analysis and some subjective opinions noted in the Assets and Challenges Assessment.

Together, the Assets and Challenges Assessment, Benchmarking Scorecard, and Stakeholder Input documented where New Hanover County stands against its benchmark regions, its assets and challenges as a business location, and provided feedback and perceptions from a broad range of stakeholders.

#### *Assets and Challenges*

As the summary below indicates, of the 63 variables analyzed, 23 are considered an Asset and 23 a Challenge (17 rated as Neutral). While the County has a significant number of advantages, the combined number of Challenges and Neutral scores indicates that there are many areas in which the County needs to mitigate its weaknesses and highlights items that County leaders could pursue to further differentiate and enhance the economic vitality of the County.

The Assets and Challenges Assessment began with a windshield tour of the County. Garner Economics assessed the region based on the qualities, elements, and infrastructure that a business will look for when considering the area as a place for its operations.

The assessment was both an objective and subjective evaluation of New Hanover County and, to a lesser extent, Wilmington and employs the following dashboard to illustrate the results. By knowing what challenges or gaps exist, the County can take the steps necessary to ameliorate a negative situation, strengthen its overall “product,” and be a more attractive business location. Likewise, by knowing the area’s strengths, the County can better market them in its efforts to attract external businesses and retain those businesses already located in the County.

#### REPORT DASHBOARD








-  Indicates the County is better (more positive) compared to a majority of the benchmark geographies or points to a positive trend or asset within the area.
-  Indicates the County is neutral, neither positive nor negative. Indicator may represent an observation or be in the middle of the benchmark geographies.
-  Indicates the County is worse compared to a majority of the benchmark geographies or points to a negative trend or challenge within the area.

FIGURE 2: ASSETS AND CHALLENGES

Neutral ratings are not summarized in this report. Detailed data can be found in the [Competitive Realities Report](#).

	 Assets	 Challenges
Access to Markets	<ul style="list-style-type: none"> <li>Well positioned to serve international markets</li> <li>Port facilities (water or inland)</li> <li>Within 1 hour of commercial air passenger service</li> </ul>	<ul style="list-style-type: none"> <li>Not centrally located for national market access</li> </ul>
Labor	<ul style="list-style-type: none"> <li>Availability of technicians and scientists</li> <li>Cost of labor</li> <li>Level of local unionization</li> <li>Availability of post-secondary vocational training</li> <li>Availability of on-the-job training assistance</li> <li>Within 1/2 hour of major university/college</li> </ul>	<ul style="list-style-type: none"> <li>Lack of availability of skilled industrial workers</li> <li>Lack of availability of managerial personnel</li> <li>Lack of availability of engineering program</li> </ul>
Access to Resources	<i>No relative assets</i>	<ul style="list-style-type: none"> <li>Lack of availability of agricultural products and/or commercial fisheries for food processing</li> <li>Lack of availability of manufacturing processes/percent of workforce in manufacturing</li> <li>Cost of electricity for industrial use as compared to the benchmarked communities</li> </ul>
Economic Development Program	<i>No relative assets</i>	<ul style="list-style-type: none"> <li>Low level of cooperation between various organizations involved in economic development activity</li> <li>Low level of awareness of community regarding economic development</li> </ul>
Access to Space	<i>No relative assets</i>	<ul style="list-style-type: none"> <li>Lack of availability of fully served and attractive industrial sites</li> <li>Lack of reasonably priced sites</li> <li>Lack of availability of suitable industrial and warehouse space (buildings)</li> </ul>










	 Assets	 Challenges
Access to Capital	<i>No relative assets</i>	<ul style="list-style-type: none"> <li>Lack of local property tax exemptions for industrial facilities (NC prohibits property tax exemptions)</li> </ul>
Government Impact on Business	<ul style="list-style-type: none"> <li>Availability of water and wastewater availability and capacity</li> <li>Availability of state or local labor training incentives</li> <li>Local SAT scores</li> <li>Quality of post-secondary education</li> </ul>	<ul style="list-style-type: none"> <li>Availability of adequate water and sewer lines to industrial sites</li> <li>Level of traffic-carrying capacity of local streets and highways</li> <li>Availability of local tax incentives compared to the benchmarked communities</li> <li>Local business permitting procedures and costs</li> <li>Zoning policies</li> <li>State business tax climate index (by the Tax Foundation.Org)</li> <li>State and local sales compared to the benchmarked communities</li> </ul>
Quality of Life	<ul style="list-style-type: none"> <li>Availability of executive-level housing</li> <li>Availability of moderate-cost housing</li> <li>Level of cultural activity</li> <li>Availability of diverse recreational opportunities</li> <li>Level of air pollution</li> <li>Attractiveness of the physical environment</li> <li>General appearance of the community</li> <li>Availability of medical care</li> <li>Quality of local restaurants</li> <li>Appearance of the Central Business District (City of Wilmington)</li> </ul>	<ul style="list-style-type: none"> <li>Climate and natural disaster data related to risk</li> </ul>

### Labor and Economic Trends













In addition to assessing New Hanover County through the criteria and measures employed by site selectors, work during Phase I examined the area's economic position against the two benchmark economies: Mobile, AL and Greenville, SC as well as the State of North Carolina and the nation as a whole. These benchmark geographies were selected by the New Hanover County project Steering Committee and team. As with the Assets and Challenges Assessment, Garner Economics used data that can be verified and, for which, comparisons with other cities or areas can be made at the

level of detail preferred by most site selection professionals. The most detailed demographics data, industry statistics, and comparative rankings were used because businesses considering the New Hanover County will do the same.













As the scorecards presented in the CRR (and replicated below) indicate, New Hanover County and Wilmington have mixed results in terms of demographics, labor, and economics.

Demographic & Labor Dynamics	
	New Hanover has experienced a population increase of 24.4 percent or 41,087 more residents over the last decade; the rate is above the nation, the state, and both benchmark communities
	New Hanover has grown at an average annual rate of 2.2 percent over the last five years—a pace above all examined geographies.
	At 67.7 percent, domestic in-migration has accounted for the majority of New Hanover's net new residents since 2001. Natural growth has contributed 23.4 percent of growth, and international growth accounts for the remaining 8.9 percent.
	At 37.6 years, the median age in New Hanover is on par with the state, the nation, and Greenville but only slightly above Mobile's 36.7 median.
	New Hanover has a higher relative proportion of residents in ages 20-34 and 65-84.
	At 1.7 percent, unionization among private businesses in the Wilmington metro is well below both benchmark communities, the state, and the nation. Similarly, the public sector unionization rate at 7.2 percent is lowest among the other geographies examined.
	Measuring crimes in cities and towns, New Hanover has lower violent crime rates than the cities and towns in both benchmark communities.
	Property crime rates are higher in the cities and towns of New Hanover than in the benchmarks and may reflect the influence of nonresident tourism activity in the selected municipalities.
	Compared to the state, the nation, and both benchmark communities, New Hanover has a higher relative proportion of residents who have attained an <i>Associate's</i> , <i>Bachelor's</i> , or <i>Graduate</i> degree.



Demographic & Labor Dynamics <i>(continued)</i>	
	New Hanover has higher relative proportions of bachelor's degree attainment in six fields: <i>Biological, Agricultural, and Environmental Sciences; Psychology; Social Sciences; Literature and Languages; Visual and Performing Arts, and Communications.</i>
	At 1536, New Hanover's 2012 SAT composite scores are above the state, the nation, and Greenville. New Hanover had the highest relative SAT scores in all three subject areas.
	Measured as completions per 100,000 residents, New Hanover has more per capita <i>Associate's, Bachelor's, and Master's</i> degree completions in STEM fields than in the two benchmark communities.
	Within STEM fields in New Hanover, the highest number of associate's degree completions are in <i>Engineering &amp; engineering technologies</i> , the highest number of bachelor's degree completions are in <i>Biological &amp; biomedical sciences</i> , and the highest number of master's degree completions are in <i>Physical sciences</i> .
	New Hanover attracts a higher proportion of new residents, ages 25 and older, with the highest level of educational attainment at <i>Some college or associate's degree</i> and <i>Graduate or professional degree</i> .
	Annually, 13.7 percent of the population ages 15 and over are enrolled in a college or graduate school in New Hanover. The percentage is well above both benchmarked communities, the state, and the nation.
	From 2002 to 2011, the number and proportion of workers who both live and work in New Hanover increased by 2.3 percent or 1,184 more workers. Over the same period, the number of in-commuters increased by 45.1 percent or 12,690 more workers.
	Over the last ten years, real GDP in the Wilmington metro increased by \$2 billion, up 25.6 percent—a rate above the nation, the state, and both benchmark communities.
	Measured in per capita terms, at \$37,297 in 2012, Wilmington has a lower relative amount of economic activity than the state and nation but is above both benchmark communities.
	Over the last five years, real per capita GDP in Wilmington declined by \$1,034, down 2.7 percent.
	At \$738, New Hanover's average weekly wage is 24.8 percent below the nation, 9.5 percent below the state, and below both benchmarks.
	After adjusting for inflation, growth in real values for the average weekly wage in New Hanover has declined by 0.5 percent (-\$3) over the last five years.



Economic Dynamics	
	New Hanover's per capita income is 16.4 percent below the nation and 0.9 percent below the state. Per capita income is 12.7 percent above Mobile's and 4.2 percent below Greenville's.
	Over the last ten years, growth in real values for the per capita income in New Hanover has declined by 0.3 percent (-\$99) and, in the last five years, decreased by 6.1 percent (-\$1,911).
	As of 2012, the Wilmington metro (old 3-county delineation) had exports totaling \$923 million. In per capita terms, at \$2,458, Wilmington's exports are below the nation and both benchmark metros.
	Adjusting for inflation, from 2005 to 2012, exports increased 37.4 percent in the Wilmington metro—a rate that is below the nation, the state, and one benchmark metro.
	As of 2012, proprietor income accounted for 13.3 percent of total employment income in New Hanover—a portion that is above the nation, the state, and both benchmark communities.
	Over the last ten years, proprietor income has increased by 71.9 percent in New Hanover, well outpacing the nation, the state, and both benchmark communities.
	Self-employment accounts for 13.9 percent of all occupations in New Hanover, a proportion well above the nation, the state, and both benchmarks.
	Over the most recent year, total employment in New Hanover is up, on average, 1.4 percent or 1,370 more jobs. The pace is above both benchmark communities but below the nation and the state.
	The recession led to a 7.4 percent job loss in New Hanover (-7,714 jobs), second only to Greenville in severity.
	In New Hanover, the average unemployment rate over the last year has averaged 8.7 percent (representing 9,472 unemployed persons). The average rate is above the nation and both benchmark communities
	At 98.0, the composite Cost-of-Living Index score in the Wilmington metro is below the nationwide index but slightly above both benchmark communities.
	New Hanover places well compared to the benchmark communities in broadband availability but tests lower in broadband speeds available to businesses.

## Local Specialization, Competitiveness & Growth

Below are general observations from an in-depth analysis of industry sectors, occupational groups, and industry clusters in New Hanover. This information is not benchmarked to other communities:

- ✓ Over the last five years, the largest absolute employment gains came from *Real Estate* (up 1,169 jobs or 14 percent). Other significant gains were made in *Arts, Entertainment & Recreation* (up 737 jobs or 25 percent) and *Finance and Insurance* (up 562 jobs or 25 percent).
- ✓ The greatest job losses have come from the *Construction* industry sector, down 3,752 jobs or 34 percent. The majority remaining absolute losses came from *Manufacturing* (down 1,294 jobs or 18 percent) and *Retail Trade* (down 765 jobs or 5 percent).
- ✓ New Hanover's industrial average earnings exceed the national same-industry average in only one industry: *Manufacturing*.
- ✓ Double-digit percentage earnings gaps, where New Hanover's industry averages are notably lower than in the nation, exist in 14 of 19 major industry sectors.
- ✓ Over the last five years, the largest absolute occupational gains came from *Healthcare Practitioners & Technical* (up 949 jobs or 15 percent). Other significant gains were made in *Sales & Related* (up 931 jobs or 5 percent) and *Business & Financial Operations* (up 557 jobs or 10 percent).
- ✓ The greatest occupational losses have come from the *Construction* occupational group, down 2,762 jobs or 33 percent.
- ✓ New Hanover's occupational average earnings exceed the national average in 8 of 23 groups. Of significance, earnings in *Production* occupations are 25.6 percent above the national average and *Architecture & Engineering* occupations are 5.7 percent above.
- ✓ The *Arts, Entertainment, Recreation & Visitor Industries* cluster has experienced strong growth (up 817 jobs over the last five years) and has a high degree of local specialization (location quotient of 1.49). Two other clusters with strong growth and high specialization are *Healthcare & Life Sciences* and *Education & Knowledge Creation*.
- ✓ The *Business & Financial Services* cluster experienced the highest absolute number of new jobs created yet does not exhibit a high degree of local specialization.
- ✓ Four clusters exhibit job growth generated from a local competitive effect: *Business & Financial Services*, *Healthcare & Life Sciences*, *Education & Knowledge Creation*, and *Chemicals & Chemical Based Products*.
- ✓ Using standard major industry classifications, two industry sectors stand out with high local specialization and strong recent growth: *Real Estate* and *Accommodation & Food Services*.
- ✓ Using standard major industry classifications, a strong local competitive effect is exhibited in three industry sectors: *Real Estate*; *Arts, Entertainment & Recreation*; and *Government*.
- ✓ Four occupational groups share high specialization and strong growth: *Food Preparation & Serving*, *Healthcare Support*, *Sales & Related*, and *Healthcare Practitioners & Technical*.

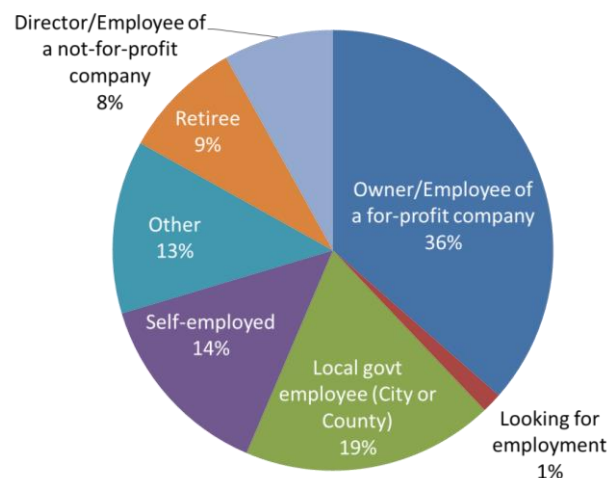
### What Stakeholders Think

In October 2013, Garner Economics held six focus group sessions with New Hanover County and Wilmington stakeholders to solicit their perceptions and opinions of the area's business climate. The discussions were also used to complement and affirm the data collected to assess the area's competitive position.

One hundred one (101) people participated in the focus groups. The focus groups were organized into the following categories: large employers; small and medium-sized employers/entrepreneurs; educators and workforce development; government and elected officials; nonprofits; and PR/marketing/media. Participants were chosen by the Steering Committee because they are representative of the focus group categories and have knowledge of issues impacting the area's business climate and its effect on companies and employers.

Additionally, an electronic survey based on the focus group responses was distributed with the assistance of other economic development

**FIGURE 2: SURVEY PARTICIPANTS**



groups in the region. There were 897 people who responded to the survey. The respondents represented a broad group of area residents, including both corporate and economic development perspectives as well as feedback from the general citizenry (see Figure 2).

Among the two groups, there were several areas of agreement. Survey respondents tended to focus on broader, quality of place assets and issues, while focus group respondents had deeper comments and concerns over particular economic assets or challenges such as workforce, lack of economic diversity, and local regulations and procedures. As Figure 3 illustrates, all agreed that efforts to improve foundational business climate issues are critical to the area's future success. Figure 4 summarizes the feedback garnered from both groups.

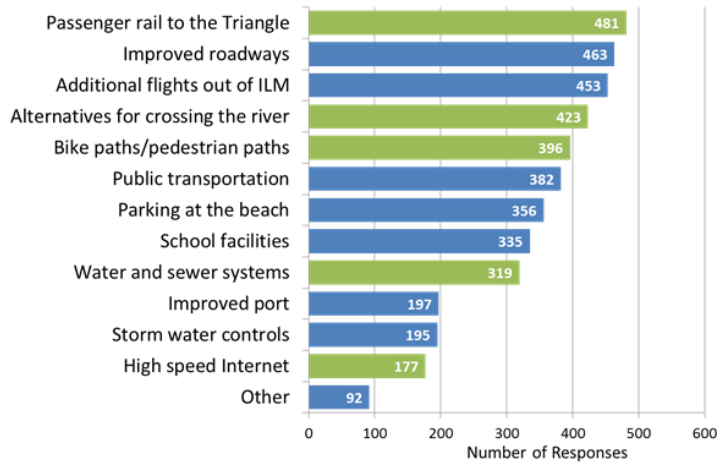
**FIGURE 3: INITIATIVES TO IMPROVE NEW HANOVER COUNTY/WILMINGTON**

**Top actions the County and City leadership should take to strengthen the area's ability to attract and retain quality companies and talent in the next 5-10 years (feedback from stakeholder input)**

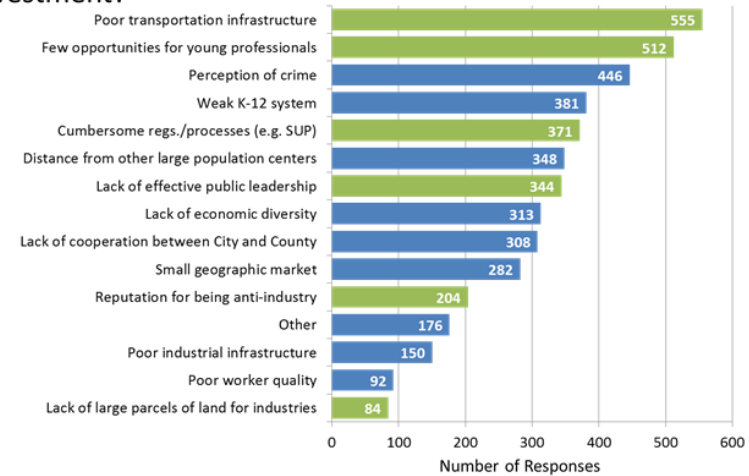
1. Create a shared vision for economic development for the City and County and set priorities based on that vision.
2. Find ways to consolidate the City and County government.
3. Look at the larger region—especially when it comes to making the case for companies to move to the area.
4. Improve the K-12 education system and create stronger linkages between the schools, higher education institutes, and businesses.
5. Greatly enhance the region's infrastructure and be more proactive than reactive in addressing updates/repairs.
6. Cultivate true leadership—both within government and among the corporate and business leaders.

FIGURE 4: SUMMARY OF FEEDBACK

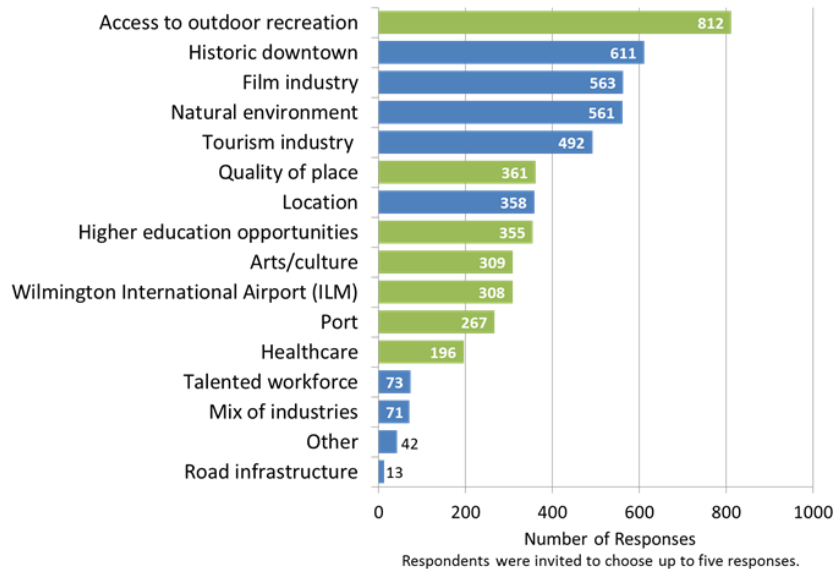
What hard or soft infrastructure is weak or missing in New Hanover County/Wilmington?



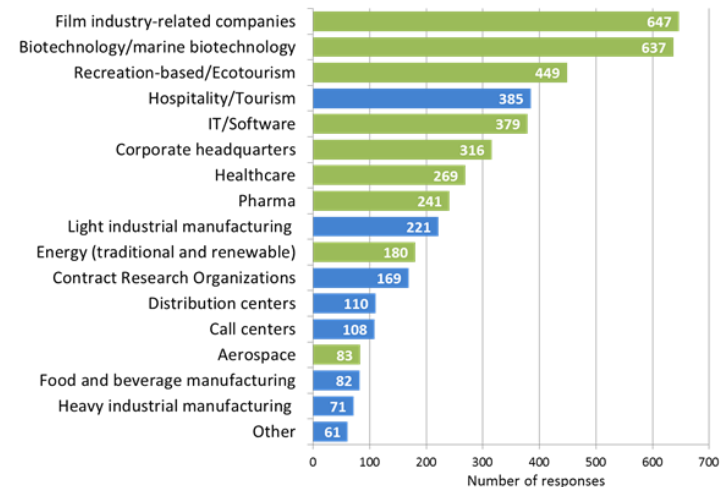
What do you think are some of the biggest obstacles to attracting, expanding, or retaining businesses and investment?



What do you see as the area's strengths?



What types of companies do you think would be a good fit for the area?



■ Responses ranked highly among survey respondents  
■ Responses ranked highly among BOTH survey respondents and focus groups

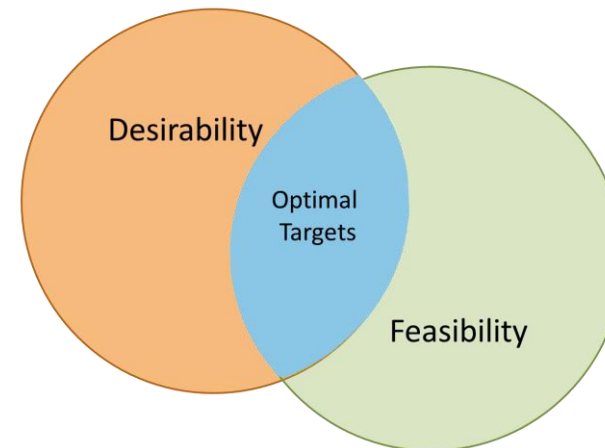
## CHAPTER 2: OPTIMAL TARGETS



The optimal industry target selection is based on the site-specific characteristics of the New Hanover County (NHC) economy. The recommended targets are for those engaged in recruiting new business to New Hanover County to prioritize resources with these industry sectors that offer the most promise for NHC. These optimal targets hold a competitive advantage to the community and, as such, allow policy makers to prioritize the region's community and economic development strategy. This is not meant to suggest that other types of industry sectors should not be recruited or welcomed if the community feels they are compatible with its desires, e.g., film production. It also does not suggest that existing local business should not be supported in plans to expand their operations if they are not one of the four optimal target industry sectors. Instead, these optimal targets are solely meant to be used as a defined focus of the County's marketing and targeting strategy.

In selecting optimal targets, Garner Economics uses a desirability and feasibility-screening matrix to select the recommended targets. Desirability includes the types of business sectors the community would like to see in the County. Feasibility includes what the County can actually achieve in the short-to mid-term, based on current or planned locational assets and in conducting an analytical analysis of the regional economy (Figure 1). Using results from the *Competitive Realities Report*, the Assets and Challenges Assessment, focus groups, and field visits, four industry targets were chosen that best match NHC's unique competitive advantages to the needs of particular industry sectors. Special attention is given to industries in the midst of significant change or innovative transformation with the strong likelihood that there will be increased interest in adding or moving operational sites.

FIGURE 1: OPTIMAL TARGET SCREENING



Each sector selected has a record of above-average wages, projected positive growth, and participation in commercial activities that will create wealth in New Hanover County<sup>1</sup>, both in the short and long term.

Because economies are dynamic and impossible to precisely predict, these four optimal targets offer opportunities across several non-competing sectors, affording a means to diversify economic development strategies and avoid risky over-concentration. Prospects are particularly interested in an established and skilled workforce and the region's capacity to supply newly trained workers, so special efforts were made to link in-demand occupations and training to the region's available workforce and supply pipeline.

The following target information is presented in a practical and workable format, avoiding complex analysis and extensive projections of future outcomes. Under each major target sector, a list of individual subsectors is provided with accompanying NAICS classifications. A full description for each subsector target can be found in Table 13. Detailed subsector targets help to bridge the gap from broad economic concepts to a workable means for identifying specific prospective industries and firms. For each target, a detailed, bulleted list of rationales is presented and identified as appealing to the needs of prospects **(P)** or the community **(C)**. This material can be used in marketing and community support efforts or to help economic development personnel prioritize targeting efforts.

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<sup>1</sup> Local wealth creation is driven largely by exporting value-added products and services or by importing outside dollars via activities such as convention attraction and tourism. The need for a community to focus on recruiting, retaining companies, and entrepreneurial companies that export their goods and services (which brings dollars back to New Hanover County) is the best recipe for wealth generation and economic success for a community/region.

### ***SPECIAL USE PERMIT: ITS IMPACT ON BUSINESS DEVELOPMENT AND THE TARGETED BUSINESS SECTORS***

In 2011, New Hanover County initiated a Special Use Permit (SUP) process designed for adding certain controls to the types of businesses that would be permitted in the county within the I-1 and I-2 zoning classifications. The introduction language regarding the SUP on the New Hanover County government website is as follows:

*Special Use Permits add flexibility to the Zoning Ordinance. Subject to high standards of planning and design, certain property uses may be allowed in the several districts where these uses would not otherwise be acceptable. By means of controls exercised through the Special Use Permit procedures, property uses which would otherwise be undesirable in certain districts can be developed to minimize any bad effects they might have on surrounding properties.*

The types of companies that are most likely to locate in the I-1 and I-2 districts are typically those that are focused on speed to market, are risk averse, and are looking to manage costs effectively. While we appreciate the intent of the SUP, we believe that it is a significant hindrance to economic development activity in New Hanover County because it adds unnecessary time and costs to the permitting and approval process. Based on the flow and structure of the County's approval process, the SUP also adds multiple layers of review for those approvals. Given that there are many other site options for companies looking to locate in a multi-state region that are not encumbered by a SUP, New Hanover County is at a substantial disadvantage.

Moreover, the current draft of the New Hanover County table of permitted uses (TOPU), which defines which types of companies need a SUP and which are permitted by right, is too broad and could adversely impact the economic vitality of the County. The current ordinance uses only the four super-broad qualitative categories (Intensive, General, Limited, Artisan) and is substantially less useful than what is being discussed as possible revisions to better define the TOPU. Even if those revisions are approved and the TOPU is defined to 86 uses, it will still be too broad to be effective. The categories are too macro in scope and design and are inadvertently prohibiting uses that are not in conflict with the intentions of the SUP. For example, some of the target industries proposed below require a SUP under the proposed four-digit code even though they should not, given that there is nothing in their manufacturing process that should necessitate the SUP screenings and controls (e.g. medical and pharmaceutical products). The County should consider using a five- or six-digit code, which offers greater specificity.

Garner Economics' concerns regarding the SUP are further elaborated upon in [CHAPTER 3: OBSERVATIONS, CONCLUSIONS AND RECOMMENDATIONS](#).

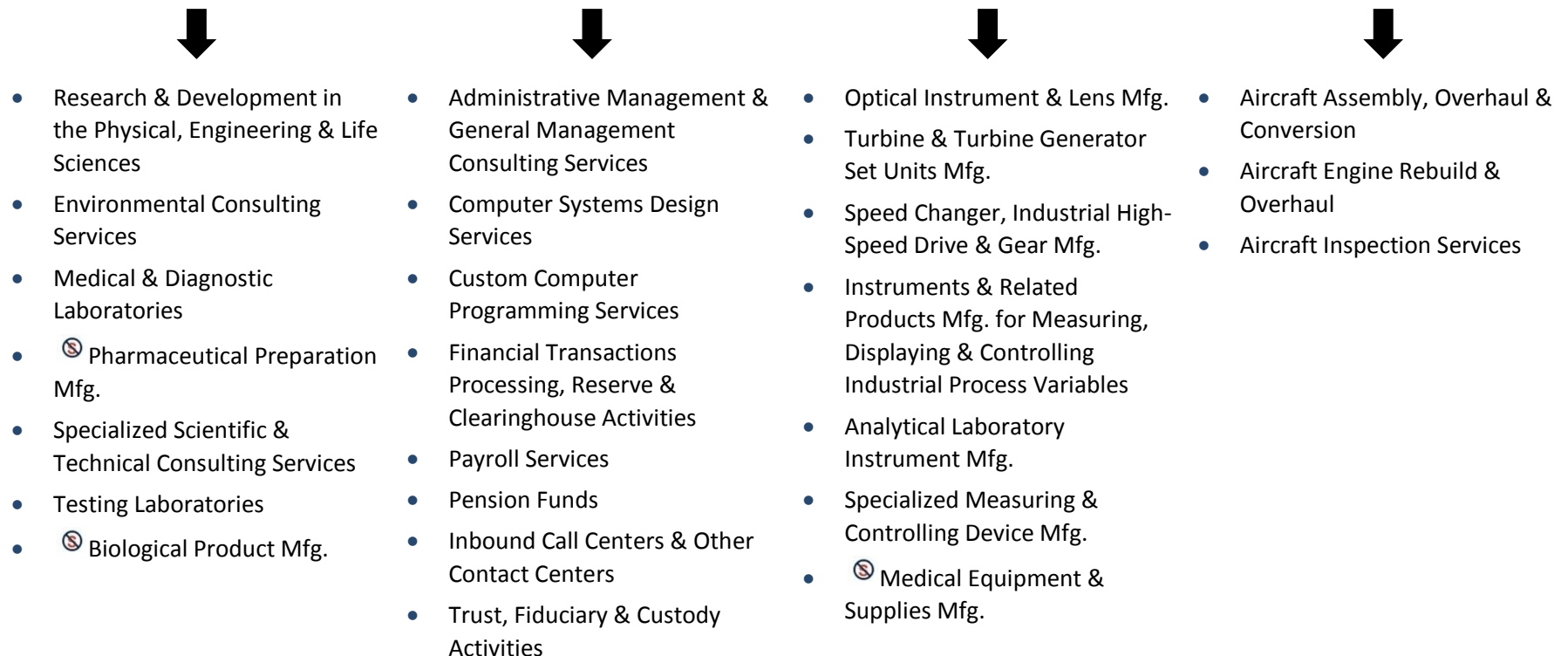


The icon to the left has been placed next to the recommended targets that currently require a SUP. Because of the onerous process the SUP would create, it is highly unlikely this type of industry will locate or grow in New Hanover County. The table of permitted uses will need to be amended to allow these designated industry sectors to be permitted by right rather than by a SUP.

## OPTIMAL TARGETS FOR NEW HANOVER COUNTY



### SUBSECTORS



## LIFE/MARINE SCIENCES RESEARCH & DEVELOPMENT



New Hanover County is well positioned to take advantage of expanding opportunities in *Life/Marine Sciences Research & Development* (Table 1). While diverse in products made and markets served, the target group shares a heavy reliance on workers in the *Life, Physical & Social Science* occupational group, composing more than 12 percent of its total workforce as compared to just 0.8 percent of the nation's employed workforce. Facility requirements for such industries also tend to be specialized, as noted further below in Exhibit 1.

An underlying current impacting many firms in the *Life/Marine Sciences Research & Development* target is a movement away from government-supported endeavors toward corporate sponsorship. The target will increasingly be linked to corporate profits and private investment. As different projects arise and new approaches to R&D are adopted, enterprise numbers and opportunities are anticipated to grow. Additionally, as project complexity and costs increase, firms will seek to outsource R&D and consulting expertise to even more highly specialized third parties.

Stricter environmental legislation will be the primary driver of growth for some firms in this target. Environmental consultants will give

advice on methods for developing environmentally friendly technology, such as solar power systems, and they will oversee the construction and implementation of plans. Furthermore, regulations regarding oil drilling will likely become stricter. As more legislation is passed to regulate offshore drilling as a result of the BP oil spill in 2010, environmental consultants will be increasingly sought out to aid private companies and their legal requirements. This will also be driven by new crude oil and natural gas reserves that are found because of the rising prevalence of hydraulic fracturing, also known as fracking.

The manufacturing component of this sector, while also heavily dependent on workers from the *Life, Physical & Social Science* occupational group, faces a different competitive environment and set of promising opportunities. Overall demographic shifts (that is to say an aging population) and healthcare reform's broadening of insurance coverage will likely lead to significant growth in product demand. Additionally, an estimated \$290 billion of pharmaceutical sales worldwide is at risk from patent expirations over the next five years, which, in turn, should drive firms to seek new ways to generate revenue. Many firms will likely change product focus toward research and development of new specialty and biologic pharmaceuticals.



#### Rationale

- Presence of AAI Pharma Services Corp., PPD, BioDuro, and Chemtex. **(P)**
- Presence of Marine Bio-Technologies Center of Innovation (MBCOI). **(P)**
- MARBIONC at UNCW. **(P)**
- Well positioned to serve international markets. **(P)**
- Low relative level of unionization. **(P)**
- Availability of suitable office space and office sites. **(P)**
- Availability of labor training incentives. **(P)**
- Air connectivity: Wilmington International Airport (ILM). **(P)**
- Among top recommended industry target in stakeholder focus groups. **(C)**
- High proportion of residents that have attained associate's, bachelor's, or graduate degrees. **(P)**
- High relative proportion of residents who hold bachelor's degrees in the field of *Biological, Agricultural, or Environmental Sciences*. **(P)**
- High relative proportion of resident population enrolled in a college or graduate school. **(P)**
- High broadband availability. **(P)**
- High relative attraction of new residents who hold a graduate or professional degree. **(P)**
- Competitive earnings rate in *Life, Physical & Social Science* occupations. **(P)**
- High local specialization and strong growth in the *Healthcare & Life Sciences* cluster. **(P)**
- Strong local competitive advantage demonstrated in the *Healthcare & Life Sciences* cluster. **(P)**
- High existing local industry specialization in *Scientific Research and Development Services*. **(P)**
- Average target subsector national earnings of \$96,396. **(C)**
- Average target subsector five-year forecasted growth of 13.9 percent. **(C)**
- 538 annual post-secondary completions in critical fields from local institutions. **(P)**
- Strong existing local pool of high-demand occupations. **(P)**
- Strong quality of place assets: executive-level housing, recreational opportunities, cultural activities, medical care, restaurants, and attractive business district. **(P)**

**EXHIBIT 1: TYPICAL LIFE SCIENCES FACILITY REQUIREMENTS**

	Hours of Operation	Floor Heights	Electrical Services	Water Supply	Wastewater	Natural Gas
<b>Basic Research Facility</b>	Typical business hours	14-18'	12 KV	8-20,000 GPD	Some pretreatment, use of neutralization tanks	Required
<b>Process Development Facility</b>	Typical business hours	14-18'	12 KV	20,000 GPD	Pretreatment using neutralization tanks	Required
<b>Pilot Manufacturing</b>	24 hours a day, 7 days a week	18-25'	15 KV	2,400 GPH per 1,000 sf. (approx. 60,000 GPD for 30K sf. facility)	Adequate public sewer capacity. Discharges require kill systems and pH pretreatment	Higher volume than research or process facilities
<b>Manufacturing</b>	24 hours a day, 7 days a week	20-40'	25 KV with redundant supply	Varies, greater than Pilot facility, redundant supply often required. (1.5 M GPD for 100k mfg. space an example)	Adequate public sewer capacity. Discharges require kill systems and pH pretreatment	High volume
<b>Fill/Finish Facility</b>	5 days of operation, 24/7 on utilities	25' minimum	12.5 KV	Varies, but significantly less than mfg. facility		Required

*Source: Deloitte Consulting LLP*

**Table 1: Life/Marine Sciences Research & Development Subsectors**

NAICS	Description	National Earnings	Five-year National Forecast
54171	Research & Development in the Physical, Engineering & Life Sciences	\$123,259	11.07%
541620	Environmental Consulting Services	\$62,381	15.5%
62151	Medical & Diagnostic Laboratories	\$69,540	14.3%
325412	Ⓢ Pharmaceutical Preparation Mfg.	\$151,668	1.9%
541690	Specialized Scientific & Technical Consulting Services	\$66,506	30.0%
54138	Testing Laboratories	\$78,582	11.1%
325414	Ⓢ Biological Product Mfg.	\$122,835	13.7%

Source: Economic Modeling Specialist, Garner Economics

**Table 2: Life/Marine Sciences Research & Development: New Hanover County Annual Post-secondary Completions in Critical Fields - 2012**

Program	Annual Completions	Institution	Program	Annual Completions	Institution
<b>Certificates</b>			<b>Bachelor's Degrees, continued</b>		
Clinical/Medical Laboratory Science	24	Cape Fear Community College	Environmental Science	40	UNC Wilmington
Pharmacy Technician/Assistant	11	Cape Fear Community College	Environmental Studies	29	UNC Wilmington
Phlebotomy Technician/Phlebotomist	23	Miller-Motte College-Wilmington	Management Information Systems	4	UNC Wilmington
<b>Associate's Degrees</b>			Marine Biology and Biological Oceanography	81	UNC Wilmington
Information Technology	6	Cape Fear Community College	Mathematics, General	20	UNC Wilmington
Oceanography, Chemical and Physical	27	Cape Fear Community College	<b>Master's Degrees</b>		
Pharmacy Technician/Assistant	3	Cape Fear Community College	Chemistry, General	14	UNC Wilmington
<b>Bachelor's Degrees</b>			Environmental Studies	8	UNC Wilmington
Biology/Biological Sciences, General	136	UNC Wilmington	Marine Biology and Biological Oceanography	8	UNC Wilmington
Chemistry, General	59	UNC Wilmington	Oceanography, Chemical and Physical	11	UNC Wilmington
Computer Science	31	UNC Wilmington	<b>Doctor's Degrees</b>		
			Marine Biology and Biological Oceanography	3	UNC Wilmington

Source: National Center for Education Statistics, Garner Economics

**Table 3: Life/Marine Sciences Research & Development**  
**New Hanover County - Existing Labor Pool of High-demand Occupations - 2013 3Q**

Occupation	Employed in NHC	Occupation	Employed in NHC
Biochemists and Biophysicists	11	Environmental Scientists and Specialists, Including Health	100
Biological Scientists, All Other	26	Geoscientists, Except Hydrologists and Geographers	52
Biological Technicians	69	Industrial Engineers	210
Chemical Engineers	110	Mechanical Engineers	332
Chemical Equipment Operators and Tenders	121	Medical and Clinical Laboratory Technicians	174
Chemical Technicians	66	Medical and Clinical Laboratory Technologists	80
Chemists	238	Medical and Health Services Managers	225
Civil Engineers	428	Medical Assistants	810
Compliance Officers	122	Medical Scientists, Except Epidemiologists	124
Computer and Information Systems Managers	108	Medical Secretaries	411
Computer Network Support Specialists	124	Natural Sciences Managers	62
Computer Occupations, All Other	52	Network and Computer Systems Administrators	148
Computer Programmers	195	Radiologic Technologists	202
Computer Systems Analysts	149	Registered Nurses	2,484
Database Administrators	49	Software Developers, Applications	155
Diagnostic Medical Sonographers	87	Software Developers, Systems Software	88
Electronics Engineers, Except Computer	50	Statisticians	53
Engineers, All Other	72	Veterinary Technologists and Technicians	148
Environmental Science and Protection Technicians, Including Health	64		

Source: Economic Modeling Specialist, Garner Economics

## HIGH VALUE OFFICE OPERATIONS



The *High Value Office Operations* target (Table 4) leverages New Hanover's unique asset mix with a select group of industries benefiting from the convergence of significant economic and technological forces. Subsector targets are responding to the demands of corporations that are seeking to adapt to rapid changes in customer expectations (increased online commercial operations, cloud computing, debit/credit card use, and smart phone transactions) while desiring to maintain focus on their core business activities. The forces driving growth in the *High Value Office Operations* target can be summarized into five major themes:

- (1) **Cost reduction:** increased demand by firms to lower in-house costs by outsourcing non-core services to firms that benefit from cost efficiencies by specializing in a specific back office operation.

- (2) **Return to quality:** as in the case of inbound call centers, firms are seeking to contract with high quality centers capable of handling intricate product inquiries, driven in large part by increased online sales.
- (3) **Specialized expertise:** increased demand by firms to outsource non-core activities that are becoming increasingly complex and require specialized skills or training.
- (4) **Technology:** increased demand by firms to utilize third-party specialized-computing resources to meet requirements for greater speed or capacity.
- (5) **Regulation:** increased demand by firms to satisfy the changing regulatory environment by outsourcing non-core activities that have high compliance costs to third-party experts.

### Rationales

- Competitive earnings rate in *Finance & Insurance* and *Professional, Scientific & Technical Services* industry sectors. **(P)**
- Competitive earnings rate in *Computer & Mathematics* occupations. **(P)**
- Competitive earnings rate in *Business & Financial Operations* occupations. **(P)**
- Availability of suitable office space and office sites. **(P)**
- Strong recent growth in the *Business & Financial Services* cluster. **(P)**
- Strong local competitive advantage demonstrated in the *Business & Financial Services* cluster. **(P)**
- Strong local competitive advantage demonstrated in the *Financial & Insurance* industry sector. **(P)**
- High existing local industry specialization in *Insurance & Employee Benefit Funds*. **(P)**
- High existing local occupational specialization in *Legal Support Workers*. **(P)**
- Availability of training incentives. **(P)**
- Air connectivity: Wilmington International Airport (ILM). **(P)**
- Among top recommended industry target in stakeholder focus groups. **(C)**
- High proportion of residents that have attained associate's, bachelor's or graduate degrees. **(P)**
- High relative proportion of resident population enrolled in a college or graduate school. **(P)**
- High broadband availability. **(P)**
- High relative attraction of new residents who hold a Graduate or professional degree. **(P)**
- Average target subsector 2012 national earnings of \$74,135. **(C)**
- Average target subsector five-year forecasted growth of 17.6 percent. **(C)**
- 847 annual post-secondary completions in critical fields from area institutions (Table 5). **(P)**
- Strong existing local pool of high-demand occupations (Table 6). **(P)**
- Strong quality of place assets. **(P)**

**Table 4: High Value Office Operations Subsectors**

NAICS	Description	National Earnings	Five-year National Forecast
541611	Administrative Management & General Management Consulting Services	\$80,146	20.4%
541512	Computer Systems Design Services	\$107,913	22.9%
541511	Custom Computer Programming Services	\$99,235	18.8%
522320	Financial Transactions Processing, Reserve & Clearinghouse Activities	\$81,346	18.2%
541214	Payroll Services	\$72,088	10.3%
525110	Pension Funds	\$65,327	23.4%
561422	Inbound Call Centers & Other Contact Centers	\$36,454	16.5%
523991	Trust, Fiduciary & Custody Activities	\$50,570	10.5%

Source: Economic Modeling Specialist, Garner Economics

**Table 5: High Value Office Operations - New Hanover County Annual Postsecondary Completions in Critical Fields- 2012**

Program	Annual Completions	Institution
<b>Certificates</b>		
Accounting Technology/Technician and Bookkeeping	6	Cape Fear CC, Miller-Motte College-Wilmington
Business Administration; Management	13	Cape Fear CC
Information Technology	6	Cape Fear CC
Legal Assistant/Paralegal	10	Cape Fear CC
<b>Associate's Degrees</b>		
Accounting Technology/Technician and Bookkeeping	22	Cape Fear CC, Miller-Motte College-Wilmington
Business Administration and Management	28	Cape Fear CC
Computer and Information Systems Security/Information Assurance	2	Cape Fear CC
General Office Occupations and Clerical Services	10	Miller-Motte College-Wilmington
Information Technology	6	Cape Fear CC
Legal Assistant/Paralegal	15	Cape Fear CC, Miller-Motte College-Wilmington

Program	Annual Completions	Institution
<b>Associate's Degrees, continued</b>		
Network and System Administration/Administrator	9	Miller-Motte College-Wilmington
<b>Bachelor's Degrees</b>		
Accounting	16	UNC Wilmington
Business Administration and Management, General	508	UNC Wilmington
Computer Science	31	UNC Wilmington
Finance, General	9	UNC Wilmington
Management Information Systems	4	UNC Wilmington
Marketing/Marketing Management	17	UNC Wilmington
Accounting	59	UNC Wilmington
Business Administration and Management, General	56	UNC Wilmington
Computer and Information Sciences	20	UNC Wilmington

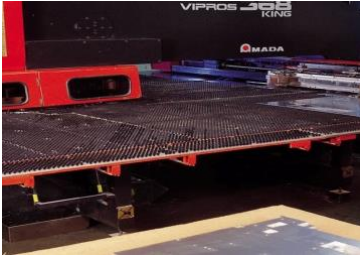
Source: National Center for Education Statistics, Garner Economics

**Table 6: High Value Office Operations: New Hanover County Existing Labor Pool of High-demand Occupations - 2013 3Q**

Occupation	Employed in NHC	Occupation	Employed in NHC
Accountants and Auditors	940	Insurance Sales Agents	963
Advertising Sales Agents	200	Interpreters and Translators	198
Bill and Account Collectors	241	Interviewers, Except Eligibility and Loan	350
Billing and Posting Clerks	539	Lawyers	519
Bookkeeping, Accounting, and Auditing Clerks	1,548	Legal Secretaries	50
Commercial and Industrial Designers	29	Legal Support Workers, All Other	42
Compliance Officers	122	Loan Interviewers and Clerks	99
Computer and Information Systems Managers	108	Loan Officers	285
Computer Network Architects	33	Management Analysts	542
Computer Network Support Specialists	124	Managers, All Other	972
Computer Occupations, All Other	52	Market Research Analysts and Marketing Specialists	265
Computer Operators	40	Marketing Managers	98
Computer Programmers	195	Mechanical Engineers	332
Computer Systems Analysts	149	Network and Computer Systems Administrators	148
Computer User Support Specialists	466	Office and Administrative Support Workers, All Other	183
Computer, Automated Teller, and Office Machine Repairers	119	Office Clerks, General	2,052
Counter and Rental Clerks	431	Paralegals and Legal Assistants	399
Couriers and Messengers	173	Public Relations Specialists	121
Customer Service Representatives	1,560	Receptionists and Information Clerks	1,339
Data Entry Keyers	155	Sales and Related Workers, All Other	209
Database Administrators	49	Sales Managers	221
Executive Secretaries and Executive Administrative Assistants	806	Sales Representatives, Services, All Other	584
Financial Analysts	295	Sales Reps, Wholesale and Manufacturing, Except Technical and Scientific Products	1,020
Financial Managers	420	Sales Reps, Wholesale and Manufacturing, Technical and Scientific Products	158
Financial Specialists, All Other	110	Secretaries/Admin Assistants (not Legal, Medical, Executive)	2,106
First-Line Supervisors of Non-Retail Sales Workers	617	Securities, Commodities, and Financial Services Sales Agents	747
First-Line Supervisors of Office/Admin Support Workers	1,001	Software Developers, Applications	155
General and Operations Managers	1,501	Software Developers, Systems Software	88
Graphic Designers	263	Tellers	452
Human Resources Specialists	233	Title Examiners, Abstractors, and Searchers	42
Insurance Claims and Policy Processing Clerks	82	Training and Development Specialists	94

Source: Economic Modeling Specialist, Garner Economics

## PRECISION MANUFACTURING



As implied by its title, the *Precision Manufacturing* target is distinguished by industries involved in highly exacting production processes and products (Table 7). The *Precision Manufacturing* group benefits from the growing demand for greater

efficiencies in a host of applications, such as energy production, pollution/waste measurement, surgical operations, and healthcare diagnosis. The group is under ongoing pressure to produce more exacting products, which should afford numerous future relocation and new establishment opportunities.

The requirement for highly skilled workers is evident by the target group's average earnings, which at \$91,973 are 145 percent above the overall national manufacturing average. Increasingly, these firms rely on computing resources and expertise to prescribe and direct manufacturing processes. The targets require three times the share of workers in *Computer and Mathematical* occupations than the average manufacturing industry—7.7 percent versus 2.2 percent of its total workforce. This target values a highly educated workforce and New Hanover's demographic profile, with elevated levels of educational attainment plus the presence of UNCW, should provide a strong point of attraction.

### Rationales

- Presence of GE Aviation and GE Hitachi Nuclear Energy. **(P)**
- High existing local industry specialization in *Aerospace Product & Parts Mfg.* **(P)**
- Among top recommended industry target in stakeholder focus groups. **(C)**
- Availability of water and wastewater capacity. **(P)**
- Well positioned to serve international markets. **(P)**
- Low relative level of unionization. **(P)**
- High proportion of residents that have attained associate's, bachelor's or graduate degrees. **(P)**
- Availability of labor training incentives. **(P)**
- Air connectivity: Wilmington International Airport (ILM). **(P)**
- Average target subsector national earnings of \$91,973. **(C)**
- Average target subsector five-year forecasted growth of 8.1 percent. **(C)**
- 300 annual post-secondary completions in critical fields from local institutions (Table 8). **(P)**
- Strong existing local pool of high-demand occupations (Table 9). **(P)**
- Strong quality of place assets: executive-level housing, recreational opportunities, cultural activities, medical care, restaurants, and attractive business district. **(P)**

**Table 7: Precision Manufacturing Subsectors**

NAICS	Description	National Earnings	Five-Year National Forecast
333314	Optical Instrument & Lens Mfg.	\$92,850	10.2%
333611	Turbine & Turbine Generator Set Units Mfg.	\$106,304	16.7%
333612	Speed Changer, Industrial High-Speed Drive & Gear Mfg.	\$74,942	2.4%
334513	Instruments & Related Products Mfg. for Measuring, Displaying & Controlling Industrial Process Variables	\$90,035	4.9%
334516	Analytical Laboratory Instrument Mfg.	\$106,945	10.5%
334519	Specialized Measuring & Controlling Device Mfg.	\$81,449	6.9%
33911	Medical Equipment & Supplies Mfg.	\$91,285	5.3%

Source: Economic Modeling Specialist, Garner Economics

**Table 8: Precision Manufacturing: New Hanover Annual Post-secondary Completions in Critical Fields - 2012**

Program	Annual Completions	Institution
<b>Certificates</b>		
Business Administration & Management	13	Cape Fear CC
Computer Engineering Technology/Technician	58	Cape Fear CC
Electrical, Electronic and Communications Engineering Technology/Technician	6	Cape Fear CC
Electromechanical and Instrumentation and Maintenance Technologies/Technicians	7	Cape Fear CC
Machine Shop Technology/Assistant	13	Cape Fear CC
Mechanical Engineering/Mechanical Technology/Technician	6	Cape Fear CC
Welding Technology/Welder	20	Cape Fear CC
<b>Associate's Degrees</b>		
Architectural Engineering Technology/Technician	17	Cape Fear CC
Business Administration & Management	28	Cape Fear CC
Chemical Engineering Technology/Technician	9	Cape Fear CC

Program	Annual Completions	Institution
<b>Associate's Degrees, continued</b>		
Computer Engineering Technology/Technician	27	Cape Fear CC
Electrical, Electronic and Communications Engineering Technology/Technician	10	Cape Fear CC
Electromechanical and Instrumentation and Maintenance Technologies/Technicians	5	Cape Fear CC
Machine Shop Technology/Assistant	10	Cape Fear CC
Mechanical Engineering/Mechanical Technology/Technician	7	Cape Fear CC
Network and System Administration/Administrator	9	Miller-Motte College-Wilmington
<b>Bachelor's Degrees</b>		
Computer and Information Sciences	31	UNC Wilmington
Management Information Systems	4	UNC Wilmington
<b>Master's Degrees</b>		
Computer and Information Science	20	UNC Wilmington

Source: National Center for Education Statistics, Garner Economics

**Table 9: Precision Manufacturing: New Hanover County - Existing Labor Pool of High-demand Occupations - 2013 3Q**

Occupation	Employed in NHC	Occupation	Employed in NHC
Chemical Engineers	110	Industrial Engineers	210
Chemical Equipment Operators and Tenders	121	Industrial Machinery Mechanics	245
Chemists	238	Inspectors, Testers, Sorters, Samplers, and Weighers	364
Civil Engineers	428	Installation, Maintenance, and Repair Workers, All Other	174
Compliance Officers	122	Laborers and Freight, Stock, and Material Movers, Hand	1,261
Computer and Information Systems Managers	108	Machinists	137
Computer Programmers	195	Maintenance and Repair Workers, General	1,062
Computer Systems Analysts	149	Management Analysts	542
Computer User Support Specialists	466	Market Research Analysts and Marketing Specialists	265
Cost Estimators	162	Mechanical Engineers	332
Customer Service Representatives	1,560	Multiple Machine Tool Setters, Operators, and Tenders, Metal, and Plastic	593
Electricians	581	Network and Computer Systems Administrators	148
Engineering Managers	129	Production, Planning, and Expediting Clerks	120
Executive Secretaries and Executive Administrative Assistants	806	Purchasing Agents, Except Wholesale, Retail, and Farm Products	171
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	182	Sales Managers	221
First-Line Supervisors of Mechanics, Installers, and Repairers	383	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,020
First-Line Supervisors of Production and Operating Workers	311	Stock Clerks and Order Fillers	1,035
General and Operations Managers	1,501	Team Assemblers	301
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	435	Welders, Cutters, Solderers, and Brazers	191
Heavy and Tractor-Trailer Truck Drivers	1,012		

*Source: Economic Modeling Specialist, Garner Economics*

## AIRCRAFT ASSEMBLY, MODIFICATION & MAINTENANCE



The *Aircraft Assembly, Modification & Maintenance* target (Table 10) should be considered an **aspirational target**, in that, while many of the necessary requirements currently exist in the county, there would still need to be the establishment of an *Airframe and/or Powerplant (A&P)*<sup>2</sup> certificate program to produce a truly competitive target.

The target represents a relatively narrow set of industries under the aircraft *Assembly, Modification & Maintenance* heading, which all share specialty-trained workers as their most significant optimal site factor. Current upheaval and expected growth in the aviation industry is opening new opportunities. Significant factors include: 1) cash-strapped airlines continuing to consolidate and outsource maintenance facilities to cut costs, 2) US-based domestic and international airlines are projected to purchase more aircraft and parts, 3) expansion of the global fleet of commercial aircraft is expected to reach nearly 30,000 units by 2021, thus increasing the global demand for commercial aircraft services, 4) many foreign companies' inability to keep up with demand is creating opportunities for American firms, and 5) an aging workforce and a large number of forecasted retirees doing aircraft maintenance and repair.

<sup>2</sup> A&Ps, also referred to as Aircraft Maintenance Technicians (AMTs), inspect as well as perform, supervise, or conduct preventive maintenance and alterations of aircraft and aircraft systems. The position requires certification by the Federal Aviation Administration (FAA).

### Rationales

- Presence of GE Aviation. **(P)**
- High existing local industry specialization in Aerospace Product & Parts Mfg. **(P)**
- Presence of Wilmington International Airport (ILM). **(P)**
- Presence of Port of Wilmington. **(P)**
- Among top recommended industry target in stakeholder focus groups. **(C)**
- Average target subsector national earnings of \$96,697. **(C)**
- Average target subsector five-year forecasted growth of 5.5 percent. **(C)**
- 130 annual post-secondary completions in critical fields from local institutions (Table 11). **(P)**
- Strong existing local pool of high-demand occupations (Table 12). **(P)**
- Well positioned to serve international markets. **(P)**
- Low relative level of unionization. **(P)**
- High proportion of residents that have attained associate's, bachelor's or graduate degrees. **(P)**
- Availability of labor training incentives. **(P)**
- Strong quality of place assets: executive-level housing, recreational opportunities, cultural activities, medical care, restaurants, and attractive business district. **(P)**

**Table 10: Aircraft Assembly, Modification & Maintenance Subsectors**

NAICS	Description	National Earnings	Five-Year National Forecast
336411	Aircraft Assembly, Overhaul & Conversion	\$120,333	2.6%
336412	Aircraft Engine Rebuild & Overhaul	\$104,212	-2.3%
488190	Aircraft Inspection Services	\$65,545	16.2%

Source: Economic Modeling Specialist, Garner Economics

**Table 11: Aircraft Assembly, Modification & Maintenance  
New Hanover Annual Post-secondary Completions in Critical Fields - 2012**

Program	Annual Completions	Institution
<b>Associate's Degrees</b>		
Computer Engineering Technology/Technician	27	Cape Fear CC
Electrical, Electronic and Communications Engineering Technology/Technician	10	Cape Fear CC
Electromechanical and Instrumentation and Maintenance Technologies/Technicians	5	Cape Fear CC
Machine Shop Technology/Assistant	10	Cape Fear CC
Mechanical Engineering/Mechanical Technology/Technician	7	Cape Fear CC
<b>Bachelor's Degrees</b>		
Computer Science	31	UNC Wilmington
Computer and Information Sciences	20	UNC Wilmington
<b>Master's Degrees</b>		
Computer and Information Sciences	20	UNC Wilmington

Source: National Center for Education Statistics, Garner Economics

**Table 12: Aircraft Assembly, Modification & Maintenance:  
New Hanover County - Existing Labor Pool of High-demand Occupations - 2013 2Q**

Occupation	Employed in NHC	Occupation	Employed in NHC
Aerospace Engineers	38	Logisticians	38
Aircraft Mechanics and Service Technicians	102	Machinists	137
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	30	Mechanical Drafters	34
Architectural and Engineering Managers	129	Mechanical Engineers	332
Assemblers and Fabricators	642	Metal Workers and Plastic Workers	1,263
Computer Systems Analysts	149	Production, Planning, and Expediting Clerks	120
Electrical Engineers	29	Purchasing Agents, Except Wholesale, Retail, and Farm Products	171
First-Line Supervisors of Production and Operating Workers	311	Software Developers and Programmers	583
Industrial Engineering Technicians	21	Software Developers, Applications	155
Industrial Engineers	210	Software Developers, Systems Software	88
Industrial Machinery Mechanics	245	Team Assemblers	301
Inspectors, Testers, Sorters, Samplers, and Weighers	4,842	Welders, Cutters, Solderers, and Brazers	214

*Source: Economic Modeling Specialist, Garner Economics*

**Table 13: Industry Descriptions**

Life/Marine Sciences Research & Development	
<b>NAICS 54171</b>	<b>Research &amp; Development in the Physical, Engineering &amp; Life Sciences</b>
This industry comprises establishments primarily engaged in conducting research and experimental development in the physical, engineering, and life sciences, such as agriculture, electronics, environmental, biology, botany, biotechnology, computers, chemistry, food, fisheries, forests, geology, health, mathematics, medicine, oceanography, pharmacy, physics, veterinary, and other allied subjects.	
<b>NAICS 541620</b>	<b>Environmental Consulting Services</b>
This industry comprises establishments primarily engaged in providing advice and assistance to businesses and other organizations on environmental issues such as the control of environmental contamination from pollutants, toxic substances, and hazardous materials. These establishments identify problems (e.g., inspect buildings for hazardous materials), measure and evaluate risks, and recommend solutions. They employ a multi-disciplined staff of scientists, engineers, and other technicians with expertise in areas, such as air and water quality, asbestos contamination, remediation, and environmental law. Establishments providing sanitation or site remediation consulting services are included in this industry.	
<b>NAICS 62151</b>	<b>Medical &amp; Diagnostic Laboratories</b>
This industry comprises establishments known as medical and diagnostic laboratories primarily engaged in providing analytic or diagnostic services including body fluid analysis and diagnostic imaging, generally to the medical profession or to the patient on referral from a health practitioner.	
<b>NAICS 325412</b>	<b>Pharmaceutical Preparation Manufacturing</b>
This US industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.	
<b>NAICS 541690</b>	<b>Specialized Scientific &amp; Technical Consulting Services</b>
This industry comprises establishments primarily engaged in providing advice and assistance to businesses and other organizations on scientific and technical issues.	
<b>NAICS 54138</b>	<b>Testing Laboratories</b>
This industry comprises establishments primarily engaged in performing physical, chemical, and other analytical testing services, such as acoustics or vibration testing, assaying, biological testing (except medical and veterinary), calibration testing, electrical and electronic testing, geotechnical testing, mechanical testing, nondestructive testing, or thermal testing. The testing may occur in a laboratory or on-site.	
<b>NAICS 325414</b>	<b>Biological Product Manufacturing</b>
This US industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin.	

Precision Manufacturing	
<b>NAICS 333314</b>	<b>Optical Instrument and Lens Manufacturing</b>
This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).	
<b>NAICS 333611</b>	<b>Turbine &amp; Turbine Generator Set Units Manufacturing</b>
This US industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.	
<b>NAICS 333612</b>	<b>Speed Changer, Industrial High-Speed Drive &amp; Gear Manufacturing</b>
This industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).	
<b>NAICS 334513</b>	<b>Instruments &amp; Related Products Manufacturing for Measuring, Displaying &amp; Controlling Industrial Process Variables</b>
This industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.	
<b>NAICS 334516</b>	<b>Analytical Laboratory Instrument Manufacturing</b>
This industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.	
<b>NAICS 334519</b>	<b>Specialized Measuring &amp; Controlling Device Manufacturing</b>
This U industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; irradiation equipment; and electromedical and electrotherapeutic apparatus).	
<b>NAICS 33911</b>	<b>Medical Equipment &amp; Supplies Manufacturing</b>
This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, ophthalmic goods, dentures, and orthodontic appliances.	



High-value Office Operations	
<b>NAICS 541611</b>	<b>Administrative Management &amp; Management Consulting Services</b>
This industry comprises establishments primarily engaged in providing operating advice and assistance to businesses and other organizations on administrative management issues such as financial planning and budgeting, equity and asset management, records management, office planning, strategic and organizational planning, site selection, new business startup, and business process improvement. This industry also includes establishments of general management consultants that provide a full range of administrative; human resource; marketing; process, physical distribution, and logistics; or other management consulting services to clients.	
<b>NAICS 522320</b>	<b>Financial Transactions Processing, Reserve, and Clearinghouse Activities</b>
This industry comprises establishments primarily engaged in providing one or more of the following: (1) financial transaction processing (except central bank); (2) reserve and liquidity services (except central bank); and/or (3) check or other financial instrument clearinghouse services (except central bank).	
<b>NAICS 541512</b>	<b>Computer Systems Design Services</b>
This industry comprises establishments primarily engaged in planning and designing computer systems that integrate computer hardware, software, and communication technologies. The hardware and software components of the system may be provided by this establishment or company as part of integrated services or may be provided by third parties or vendors. These establishments often install the system and train and support users of the system.	
<b>NAICS 541214</b>	<b>Payroll Services</b>
This industry comprises establishments (except offices of CPAs) engaged in the following without also providing accounting, bookkeeping, or billing services: (1) collecting information on hours worked, pay rates, deductions, and other payroll-related data from their clients; and (2) using that information to generate paychecks, payroll reports, and tax filings. These establishments may use data processing and tabulating techniques as part of providing their services.	
<b>NAICS 541511</b>	<b>Custom Computer Programming Services</b>
This industry comprises establishments primarily engaged in writing, modifying, testing, and supporting software to meet the needs of a particular customer.	
<b>NAICS 525110</b>	<b>Pension Funds</b>
This industry comprises legal entities (i.e., funds, plans, and/or programs) organized to provide retirement income benefits exclusively for the sponsor's employees or members.	
<b>NAICS 561422</b>	<b>Inbound Call Centers &amp; Other Contact Centers</b>
This industry comprises establishments primarily engaged in operating call centers that receive communications for others via telephone, facsimile, email, or other communication modes for purposes such as providing information or assistance regarding a client's products or services. These establishments do not own the product or provide the services they are representing on behalf of clients.	
<b>NAICS 523991</b>	<b>Trust, Fiduciary &amp; Custody Activities</b>
This US industry comprises establishments primarily engaged in providing trust, fiduciary, and custody services to others, as instructed, on a fee or contract basis, such as bank trust offices and escrow agencies (except real estate).	



Aircraft Assembly, Modification & Maintenance	
<b>NAICS 336411</b>	<b>Aircraft Overhaul &amp; Conversion</b>
This US industry comprises establishments primarily engaged in aircraft conversion (i.e., major modifications to systems); and complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).	
<b>NAICS 336412</b>	<b>Aircraft Engine Rebuild &amp; Overhaul</b>
This US industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).	
<b>NAICS 488190</b>	<b>Aircraft Inspection Services</b>
This industry comprises establishments primarily engaged in providing specialized services for air transportation (except air traffic control and other airport operations).	



CHAPTER 3: WHERE DO WE GO FROM HERE? OBSERVATIONS, CONCLUSIONS, AND RECOMMENDATIONS



As illustrated by the previously published *Competitive Realities Report*, New Hanover County and Wilmington have several economic assets upon which to build. However, the area suffers from many challenges that are impeding its ability to diversify its economy and attract high-quality companies.

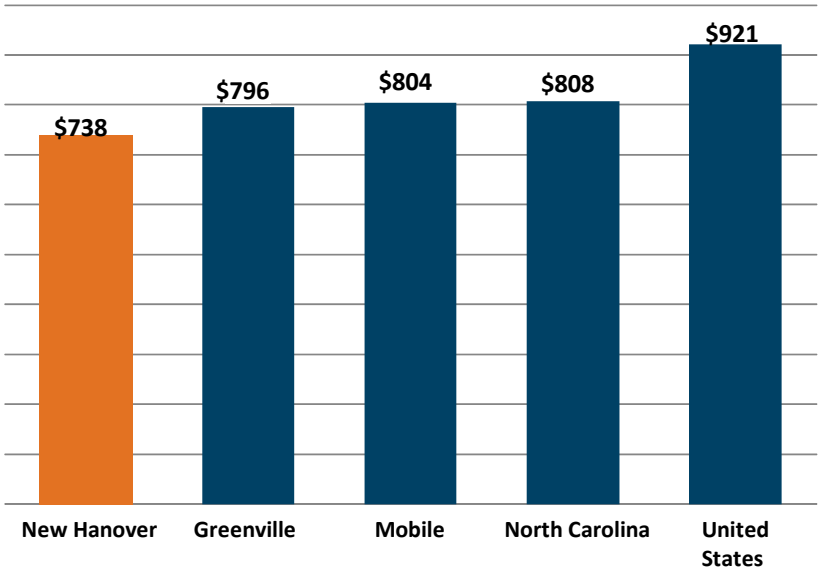
This inability to attract higher-wage, higher-quality jobs and a more diverse range of companies has resulted in the region having a significantly lower average wage rate than its peer regions, the state, and the national average (Figure 1). Yet, competition to attract and retain such companies is high. New Hanover County will need to make substantial changes if it hopes to diversify its economy and create more and better job opportunities for its citizens.

What is Competitiveness?

An area’s economic competitiveness depends on several factors. On a macro level, as illustrated in Figure 2, it includes not only the regulatory environment and infrastructure an area provides but also its talent base, available sites, and economic development service delivery. A favorable tax environment and the willingness to offer creative and unique incentive packages are important, as are low operating costs and reliable, affordable sites. Similarly, companies look for areas that offer relevant and scalable skilled labor along with low labor costs as much as they look for quality sites that are flexible and allow for future expansion with minimal development time. Finally, the ability of an area to provide economic development services—for example, clear, succinct, and focused marketing messages, organized and coordinated outreach, and high levels of client service—sets leading areas apart.

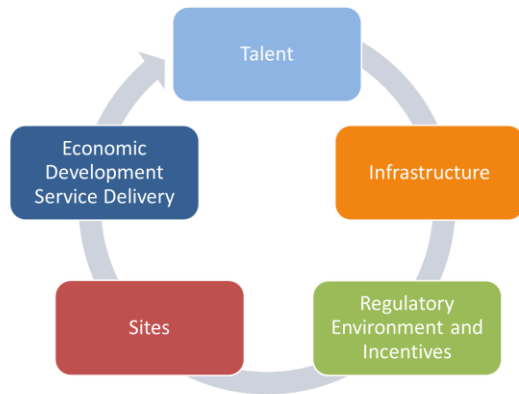
More specifically, Figure 3 illustrates the top business factors that companies rank as the most important in their site selection process according to an annual survey conducted by *Area Development Magazine*. The survey consists of a cross-section of companies of diverse industry sectors and sizes. Figure 4 notes the top “Quality of Place” factors companies consider important when choosing a new location. Garner Economics developed recommendations with an understanding of what these potential investors, “the customer,” deem critical in their decision-making process.

FIGURE 1: AVERAGE WEEKLY WAGE, 2013 2Q



Source: US Bureau of Economic Analysis, Garner Economics

FIGURE 2: ELEMENTS OF COMPETITIVENESS



Though New Hanover County ranks well in *Area Development's* “Quality of Place” factors (as indicated by the Assets and Challenges Assessment in Chapter 1), outside of public safety and the availability of quality health care, other quality of place factors are considered less important by companies in their decision on where to expand than the “Business Factors” noted in Figure 3.

### Strategy Goals

Since the end goal of this strategy is to help build a business climate with the attributes that companies seek when making investment decisions on where they should locate, grow, or expand, the recommendations that follow place higher priority on identifying ways New Hanover County can mitigate challenges in those areas where it is not as strong in the eyes of location advisors and companies.

This strategy's first objective is to provide a framework for New Hanover County to more effectively deploy its economic development service delivery and activities to support and augment the area's ability to attract high-quality jobs and talent to the region.

FIGURE 3: BUSINESS FACTORS

Ranking	2013	2012
1. Availability of skilled labor	95.1	89.4 (3)
2. Highway accessibility	93.5	90.1 (2)
3. Labor costs	90.8	90.8 (1)
4. Occupancy or construction costs	87.4	82.8 (5)
5. Availability of advanced ICT services	84.6	85.1 (4)
6. Available buildings	83.3	78.4 (8)
7. Corporate tax rate	82.4	79.3 (7)
8. State and local incentives	81.9	71.1 (13)
9. Low union profile	81.4	73.5 (10)
10. Energy availability and costs	80.8	81.3 (6)
11. Tax exemptions	80.6	75.4 (9)
11T. Right-to-work state	80.6	72.6 (11)

Source: *Area Development Magazine*, 2014

FIGURE 4: QUALITY OF PLACE FACTORS

Ranking	2013	2012
1. Low crime rate	80.9	79.3 (1)
2. Health care facilities	79.7	69.8 (2)
3. Housing costs	75.3	66.9 (4)
4. Ratings of public schools	73.0	63.3 (5)
5. Housing availability	71.5	69.8 (2T)
6. Recreational opportunities	66.4	52.9 (8)
7. Colleges and universities in area	59.5	61.6 (6)
7T. Climate	59.5	55.0 (7)
8. Cultural opportunities	54.8	48.9 (9)

Source: *Area Development Magazine*, 2014

This objective is based on the assumption that the County as a whole must become proactive in shaping its economic future but with a more targeted approach and better defined roles and responsibilities. The County leadership and staff must also take a leadership role in advocating for policy changes and making the case for how such economic development enhancements will improve the overall quality of place for the area.

As the data in the discovery phase suggests, New Hanover County has several challenges that must be mitigated if the area is to retain its current business base and begin attracting the types of companies its leadership and citizenry desire. Its current economic base produces

**FIGURE 5: STRENGTHENING FOUNDATIONS AND CREATING A GAME-CHANGING ADVANTAGE**



**Transformational initiatives that will have profound, positive, long-term economic impact to the New Hanover County economy if implemented:** These efforts will set New Hanover County apart from current peers and greatly strengthen its competitive position.

**Changes to the foundations of the area's business climate and economic development service delivery:** These recommendations seek to mitigate current challenges and place New Hanover County on par with its current competition.

lower wages than all of its peers, the state, and the national average. To diversify its economic base and create more and better economic opportunities for its citizens, the County must set itself apart from other regions to win such projects and build a sustainable economic future for area. New Hanover County must not only strengthen its business climate fundamentals, it must also take on transformational initiatives that will have a positive, game-changing effect on the County by creating long-term economic impact (Figure 5).

By better connecting and leveraging the region's infrastructure, government structure, business climate, talent and workforce, and entrepreneurship toward the County's long-term economic development goals, New Hanover County can not only overcome current challenges but also surpass its competition.

#### *A Holistic Approach*

Perhaps the most important recommendation this strategy hopes to impart is the need for the County to work with the entire community to attain these economic goals. The County cannot accomplish the enhancements outlined in this plan alone. Within the strategy, there are actions that the County can and should take independently, but there are many more for which it can only be a catalyst or advocate. To fully succeed in carrying out the strategy, all entities in the County—both community efforts and economic development concerns—will have to work together and be committed to raising the bar for economic development and creating opportunities for the County's citizens.

**New Hanover County's current economic base produces lower wages than all of its peers, the state, and the national average.**

—Assets and Challenges Finding

Going forward, the County should make the case with local and state partners and stakeholders for how new initiatives or the changes in policies will improve New Hanover County's business climate and, in turn, how such changes will allow the County, the City of Wilmington, and other economic development groups in the region to provide leadership and vision in setting the area's future economic development course. In some instances, the County will serve as the catalyst or facilitator to encourage change; in others, it may be a partner. The level of engagement and leadership for the County is calibrated and described within each recommendation.

### Pathway Recommendations

Recommendations are categorized under three areas of opportunity: Organizational (**Execute Effectively**), Product Improvement (**Build a Better New Hanover**), and Product Marketing (**Tell the Story**). The success of the economic development strategy for New Hanover County will depend on the County and area having well defined priorities and creative but actionable policies in each of these areas.

Recommendations followed by a **(T)** are considered transformational in nature and are those that Garner Economics believes would have a profound, positive, long-term economic impact to the region's economy if implemented.

***Within all three sections, the following recommendations may note which organization in the region should be the lead, best practice example(s), and cost data, all where applicable.***

## EXECUTE EFFECTIVELY (ORGANIZATIONAL)

If New Hanover County is to enhance its role as a leader in economic development for the area, it must align its mission and focus on those areas that will directly impact economic growth.

### Strategy:

**Build a focused economic development service delivery mechanism for existing and potential businesses in the County and collaborate with other municipal economic development entities to work more seamlessly and present a unified brand to external clients.**

### Goal/Results:

**The County is better able to attract the types of industries and talent that will make the New Hanover County/Wilmington area competitive. In doing so, the County will serve as a deal flow catalyst that delivers high-value business services to its constituents.**

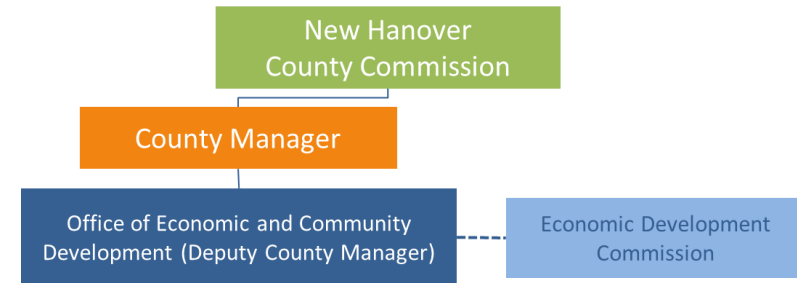
As a whole, the area's business development activities appear to be reactive. During the discovery phase, several comments were made indicating that there has been a lack of leadership in the area in setting a vision for economic growth. This perception is validated by current policies in place that have the unintended effect of discouraging certain types of business that would be beneficial for the area. The tactics and recommendations that follow provide suggestions to make the County more proactive in its role as an economic development lead and set a model for others in the region.

## 1. Create a County Department of Economic and Community Development and hire a Director.

**Observation:** New Hanover County (NHC) government does not have an office of economic development or an economic development director. Rather, they have contracted with Wilmington Business Development, Inc. (WBD) to have that organization represent NHC in its economic development efforts as it relates to business recruitment and retention. In focus groups and from feedback with the electronic surveys, there was strong consensus that both county and city governments needed to be more proactive in economic development service delivery, have a better understanding of the economic development process, serve as a facilitator with business constituents in navigating county government practices and procedures, and serve as both a catalyst and facilitator for economic development ventures.

**Recommendation:** New Hanover County should create a Department of Economic and Community Development (DECD) that will focus on business recruitment (in partnership with WBD), business retention, product development (community improvement as it relates to economic development), and serving as an ombudsman or liaison between county government and those individuals and businesses considering an investment or expansion in the County. This office will serve under the organizational structure of the County Manager and, as such, the director hired to lead the office will report to the County Manager (Figure 6). The office would work in tandem with WBD and the multitude of other economic development organizations that exists in NHC. Municipalities in the United States that are serious about growing their communities have a department that is focused solely on activities related to facilitating investment decisions in their respective communities or on working to enhance the product of the County so that there is something to sell (e.g., business parks, inviting downtowns, a competitive business climate, and more).

FIGURE 6: RECOMMENDED ORGANIZATIONAL CHART



In tandem with this Department, it is recommended that the County create a Development Commission comprised of representatives from the community but slanted towards members of the business community. The Commission would have a dotted line reporting relationship structure to the DECD. The appointees to the Commission will serve in an advisory and oversight role to make sure that the DECD and the County's economic development efforts remain focused on the role of enhancing the economic vitality of the County and do not fall into the entanglement of a government bureaucracy or lose focus on its mission (see Figure 6 for the organizational design). The Commission membership should be a blend of private sector business representation and public sector officials who are policy makers (for example, County Commission members and those who execute the policy, e.g., County Manager). A line item budget for staffing the position is noted in Figure 7.

**Lead organization:** New Hanover County Commission

**Cost:** \$365,000 per year

**Best practice example:** Suffolk County, NY

<http://www.suffolkcountyny.gov/Departments/EconomicDevelopmentandPlanning.aspx>

FIGURE 7: PROJECTED BUDGET

Expenditure	Projected Amount
Salaries (Director + Admin)	\$160,000
FICA	12,240
Medical and Dental	19,026
NC Local Govt. Retirement	11,648
Long-term Disability	320
Travel	35,000
Auto allowance or county vehicle	3,600
Publications/Marketing	50,000
Training	5,000
Professional Services	500
Contracted Services	35,000
Materials & Supplies	26,500
Ins and bonds	2,000
Dues and Subscriptions	2,000
Printing & Copier Exp.	2,166
<b>TOTAL EXPENDITURES</b>	<b>\$365,000</b>

## 2. Create a three-county micro marketing alliance of New Hanover, Brunswick, and Pender Counties.

**Observation:** The three counties noted above have a natural synergistic relationship to each other based on workforce commuting patterns, retail trade, and healthcare service delivery. These three counties should be designated as the official metropolitan statistical area (MSA) as defined by the US Government. But, based on the government's current process in defining MSAs, this is not the case

(Brunswick has been moved to the Myrtle Beach SC MSA). Notwithstanding, this three-county relationship exists, and the linkage grows stronger economically.

Garner Economics subscribes to the philosophy that an area markets itself regionally and sells itself locally. You must have a strong regional effort in place to present the region globally in the attraction and retention of business. Local economic development groups must then sell or close the deal, which is why being prepared on a local level is paramount to success. North Carolina's Southeast (NCSE) is the regional group that serves 13 counties in southeast North Carolina. It serves a broad and expansive geographic area. The State of North Carolina will end its funding of the state regional groups in 2014, leaving those groups that survive to do so on private dollars. The NCSE has done a good job of marketing the region over the years, but the size of its geography and little commonality between the coastal counties versus those in the far western part of the NCSE region make marketing messages problematic.

**Recommendation:** Wilmington Business Development, Inc., which serves both New Hanover and Pender Counties in its economic development efforts, should partner with Brunswick County (Brunswick County EDC) and lead the formation of a new group that will solely focus on branding and marketing this three-county micro region. These three counties combined, pooling their resources, would have a significant impact on marketing the sub-region effectively to site location advisors and to companies directly. The marketing alliance would focus on creating and maintaining a three-county regional website, participation in statewide and US industry solicitation events, familiarization events for the three counties focused on both companies and consultants, electronic and print marketing to a targeted list of companies, and more.

**Lead organization:** Wilmington Business Development, Inc., with support and participation from the Brunswick County EDC and the Pender County Commission

**Cost:** \$75,000 per year (\$25,000 from each county)

**Best practice example:** Guilford, Forsyth, Alamance, and High Point have formed a micro-alliance apart from the Piedmont Triad.

### 3. Consolidate services and explore the feasibility of consolidated government in New Hanover County. (T)

**Observation:** Many focus groups and electronic survey respondents noted that—based on the small geographic size of NHC and a natural synergy that exists between the governments of New Hanover County and the City of Wilmington—the two entities should explore the economic feasibility of consolidated government or, at the very least, more examples of consolidated services. Almost all of the respondents discussed the nearly impossible nature of having the beach municipalities want to participate in consolidated government because of their fierce independence, but the invitation to explore the possibility should be extended.

Comments were made about the need for local government(s) to operate more cost-effectively and efficiently and with better customer service towards the public they serve. Economic growth and development occurs when a community can provide a competitive advantage and create an atmosphere of success for individuals and firms when they make a capital investment in the community. Government's role is to provide a business climate that nurtures and promotes effective growth without being onerous for businesses of all sizes to operate profitably.

**Recommendation:** Ideally, the governments of New Hanover County and the City of Wilmington should agree to explore this possibility by

engaging a neutral third-party expert to conduct a Cost/Benefit Analysis of consolidated government or, at the very least, consolidated services in the region. (Entities such as the UNC School of Government's community and economic development, leadership and governance programs, or the Swain Center are potential partners.)

**Lead organization:** New Hanover County and the City of Wilmington

**Best practice examples:** Successful examples of consolidated government include Nashville, TN and Jacksonville, FL, both doing quite well in their job creation and wealth-building efforts. Macon, GA recently implemented a program in January of this year.

### 4. Advocate for and develop a realistic and sustainable incentive policy for New Hanover County (and City).

**Observation:** As noted by those in both County government and Wilmington Business Development (WBD), incentive offerings from New Hanover County are unstructured and flexible, by design. The result is that they are also unpredictable. Though being adaptive and flexible in incentive offerings has merit, most (not all) companies, consultants, and developers would prefer to see a uniform incentive structure based on the value of the capital investment, jobs created, and total economic impact on the community. In short, the investor would like to know the ground rules up front as it relates to incentives.

**Recommendation:** To properly and more accurately set expectations for companies considering investment in New Hanover County, the County should catalog the incentives that each governmental jurisdiction offers to new and existing business and the eligibility criteria for each. Moreover, a uniform incentive policy that incorporates those policies and procedures should be developed with the level of incentives calibrated to projected economic impact of the

project and the projected return on investment to the community. Each jurisdiction and the County should post the information on a page on their website that is easily accessible.

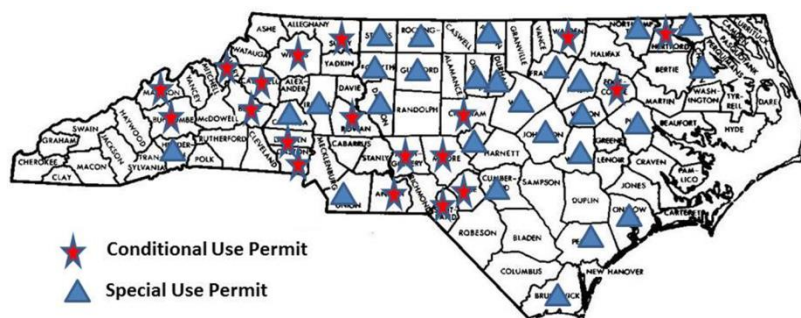
**Lead organization(s):** New Hanover County, City of Wilmington, Wilmington Business Development, Inc.

**Best practice example:** Wichita and Sedgwick County, Kansas.  
[http://www.sedgwickcounty.org/finance/incentive\\_policy.asp](http://www.sedgwickcounty.org/finance/incentive_policy.asp)

## 5. Eliminate the Special Use Permit from the County's permitting process or modify the current Table of Permitted Uses. (T)

**Observation:** There are 46 counties in North Carolina (out of 100) that require a Special Use Permit (SUP) or some form of special exception permit (See Figure 8). Many of these 46 counties designed a permit to discourage specific types of businesses such as adult entertainment, shooting ranges, hazardous or nuclear waste, landfills, and other types of related classifications that most would agree are not economic generators or are potentially noxious in nature. An effective SUP seeks to define narrow and specific uses that most companies and location advisors would consider to be an acceptable economic use and that specifically identifies uses that would be not acceptable.

FIGURE 8: NC JURISDICTIONS WITH EXTENSIVE INDUSTRIAL REVIEW



When New Hanover County initiated the SUP in 2011, it did so to add certain controls on the types of businesses that would be permitted in the County within the I-1 and I-2 zoning classifications in order to protect the County's air-quality designation. The genesis of New Hanover County's SUP was the potential of the County to be designated as a non-attainment area for particulate air emissions and the decision to locate a Titan Cement facility in New Hanover County.

However, the current language regarding the SUP is confusing, ambiguous, and too broad in its definition. By only using the four super-broad qualitative categories—Intensive, General, Limited, Artisan—the SUP as currently written is substantially less useful than what is being discussed as possible revisions to better define the Table of Permitted Uses (TOPU).

As a result, certain types of industry sectors—some of which may be a good and desirable fit for the County—fall under the SUP regulations and would need to go through the additional time and expense of being evaluated by multiple layers of staff, a planning commission of appointed community volunteers, and, ultimately, the County Commission if they were to locate in the County.

Such unintended consequences of the SUP have created a negative perception of New Hanover County as a potential business location in the eyes of many location advisors and companies seeking expansion locations. Garner Economics conducted an informal poll of several national site location consultants and asked them, hypothetically, if they would consider NHC for a typical manufacturing project given the County's SUP as defined by the existing ordinance. There was complete consensus among the group that, unless the client specifically mandated that the site be located in NHC, the advisor would not consider New Hanover County as a possible location. Such unanimity is highly rare since there is generally a broad set of priorities and criteria for any project; for a single ordinance to be

rejected by all suggests that it is excessively limiting and a major deterrent to potential investment.

The impact of the ordinance and the perception held by those making location decisions on the economic health of the area is best illustrated in considering the opportunity cost to the County of unintentionally prohibiting certain uses under the SUP. For example, the optimal target analysis shows that New Hanover County has a competitive advantage in attracting *Life/Marine Sciences Research & Development* and *Precision Manufacturing*. At least three of the potential subsectors in those targets—*Pharmaceutical Preparation Manufacturing*, *Biological Product Manufacturing*, and *Medical Equipment & Supplies Manufacturing*—would only be allowed if a SUP was first obtained. With average annual salaries well higher than the current NHC average and strong projected growth, an increase in jobs and opportunities in those sectors would be a positive development for New Hanover County (Figure 9). However, the existence of, and current definitions under, the SUP will deter such opportunities from considering a location in New Hanover County.

Analysis of New Hanover County's current wage rates and the broader sectors impacted by the SUP reinforces this point. Both *Manufacturing* and *Professional, Scientific & Technical Services* are a

FIGURE 9: OPTIMAL TARGET EXAMPLES OF OPPORTUNITY COSTS OF SUP

Subsector	National Earnings	Five-year National Forecast	% of current NHC average wage
Pharmaceutical Preparation Mfg.	\$151,668	1.9%	259%
Biological Product Mfg.	\$122,835	13.7%	190%
Medical Equipment & Supplies Mfg.	\$91,285	5.3%	115%

FIGURE 10: AVERAGE ANNUAL INDUSTRY EARNINGS COMPARISON  
2013 2Q

	New Hanover	United States
Utilities	\$123,839	\$128,090
Management of Companies	\$96,807	\$120,678
Information	\$53,413	\$86,500
Finance and Insurance	\$62,554	\$81,497
Mining	\$26,498	\$79,954
Wholesale Trade	\$57,672	\$75,799
Manufacturing	\$95,130	\$75,348
Professional, Scientific & Technical Services	\$60,975	\$74,360
Government	\$56,087	\$64,135
Healthcare & Social Assistance	\$49,135	\$52,436
Transportation & Warehousing	\$42,928	\$51,884
<b>Total</b>	<b>\$42,289</b>	<b>\$51,548</b>
Construction	\$42,952	\$50,173
Educational Services (Private)	\$21,238	\$36,144
Administrative Services	\$29,594	\$34,012
Retail Trade	\$28,666	\$30,865
Real Estate	\$24,135	\$30,537
Arts, Entertainment & Recreation	\$18,783	\$27,692
Agriculture, Fishing	\$23,028	\$27,659
Accommodation & Food Services	\$17,428	\$20,710

Source: Economic Modeling Specialist, Garner Economics

small percentage of current employment but have higher than average wages in the County. As noted above, these industries are not likely to choose NHC because of the SUP. Conversely, sectors such as *Arts, Entertainment & Recreation* or *Accommodation & Food Services* that are not affected by the SUP make up a large percentage of current employment but have lower than average wages (Figure 10)

**Recommendation:** The NHC Commission should abolish the SUP to enhance the economic vitality of NHC, better allow the County to compete for projects that are deterred by the current SUP ordinance, and mitigate the current perception of location advisors that the County is overly prohibitive in the broad SUP areas.

If County leadership believes that such a policy change is not feasible given stakeholder and community sentiment, the County should advocate for substantial modifications to the TOPU to reflect the reality of today's manufacturing processes and to better identify the types of uses the community will benefit from and permit. Specifically, the NHC Planning Commission should modify the TOPU to reflect the recommended industry targets in Chapter 2. Additionally, the Planning Commission should use five- or six-digit NAICS codes rather than the current four-digit code being discussed as an amendment to the TOPU. A five- or six-digit code will offer greater specificity regarding which industry types require a SUP or are permitted by right.

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**"We put a lot of roadblocks in before businesses can establish themselves and set up a presence."**

—Focus group participant

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## 6. Recruit and help train business leaders to serve in elected office and to serve on appointed boards and commissions. (T)

**Observation:** A community's economic development success is predicated on the quality of its public leaders—current and future—who are prepared to serve with excellence and make a difference. Those communities that are proactive in identifying quality leaders to run for office or to serve in appointed capacities on municipal boards and commissions, have been successful by having the business community—most typically represented by a Chamber of Commerce—host a political institute to help train and increase understanding of the local (or state) political process over the years.

Numerous comments were heard in several of the focus groups about how challenging the business climate of the City and County can be due to having several elected officials and municipal staffs that are perceived to be unfriendly toward business or unaware of the economic implications of certain actions. A sample comment that was heartily agreed upon was: "We have to figure out a way to get the private sector leaders more engaged in the local politics. We need a local government that is pro-business and there to help rather than hinder."

**Recommendation:** The Wilmington Chamber, representing the voice of the business community, should conduct its own political institute using the model of what is working successfully in Jacksonville, FL.

**Lead organization:** Wilmington Chamber

**Best practice example:** Jacksonville, FL Political Leadership Institute, part of the Jacksonville Chamber of Commerce  
<http://www.jaxrppli.org/>

## 7. Support Small and New Businesses.

**Observation:** The Kauffman Foundation suggests that, nationally, new firms and young businesses disproportionately contribute to net job creation throughout the economy and account for more than two-thirds of gross job creation. Data from the *Competitive Realities Report* suggest that such activity is strong in New Hanover County. Proprietor income accounted for 13.3 percent of total employment income, and it has increased 71.9 percent over the last ten years—well outpacing the nation, the state, and both benchmark communities. Nevertheless, focus groups, in particular, noted that efforts to support this growing community in New Hanover County and Wilmington are not widely communicated and are still nascent. The Center for Innovation and Entrepreneurship (CIE) has been a positive, recent step to focus such efforts; however, more could be done. In addition to lacking a central office or resource to assist small businesses and entrepreneurs, area companies face a limited availability of venture capital, lack an association or other networking organization, and generally do not have strong linkages to UNC Wilmington (with the exception of CIE) or Cape Fear Community College.



NC IDEA presentation at CIE

### Recommendations:

- a. Increase communications with small businesses
- b. Identify existing resources that will help small and new businesses grow.

New Hanover County and Wilmington should build upon the momentum created by CIE and the programming at UNC Wilmington and help small businesses and start-up firms (not only technology-based start-ups) be more productive and innovative.

To begin, New Hanover County should more aggressively communicate the various resources within the County and region to existing small businesses/start-ups. It (or a designated organization) should also work with groups that are involved in education and workforce development—including local community and four-year colleges, New Hanover Public Schools, and other vocational and technical schools—to include entrepreneurship as a fundamental economic development tenet and embed entrepreneurship in the ethos of the County. This will be done collectively by teaching individuals and companies both what it takes to bring an idea to market and how they can better leverage available resources within the County, as well as helping to identify connections among entrepreneurs and larger companies to help them grow and prosper.

As a tangible first step, New Hanover County should build out the “Starting a New Business” page on nhcgov.com to describe the services offered for small and new business in the County. To the extent possible, New Hanover County should also support and leverage the existing organizations and efforts. The County should list organizations such as CIE, the SBTDC office at UNC Wilmington, and the Cape Fear Community College Small Business Center on the Related Links” section of the website. In addition, the County should provide the business and economic development case for why efforts to retain and grow small, agile companies and to retain the area’s entrepreneurial talent are important to the area.

Concurrently, as the County builds the Department of Economic and Community Development, a staff member within the department should be tasked with helping businesses navigate the County (and City of Wilmington) processes and with helping identify resources and connections for the business. Similar to a traditional business retention and expansion program, the feedback and information gleaned by the staff can then be used to advocate for new services or policy changes that would better serve the on-the-ground needs of

local business. The Department could also work with other entities in the region like CIE or the Cape Fear Community College Small Business Center to host informal monthly networking events to connect the local business community to key economic development stakeholders and the County leadership.

**Best practice examples:** The City of Seattle has worked to facilitate connections and provide on-the-ground services to businesses needing assistance. Additionally, a dedicated city staff advocates for policies and service changes to improve Seattle’s business climate. [http://www.seattle.gov/economicdevelopment/business\\_start.htm#Guide](http://www.seattle.gov/economicdevelopment/business_start.htm#Guide)

Garrett County, MD: Garrett College and Garrett County Economic Development created the Garrett Information Enterprise Center, a business incubator that supports economic growth in Garrett County “by creating an environment for facilitating the successful development of technology businesses.” The Center’s resource center is a one-stop page for small business and entrepreneur resources in the County: <http://www.giecworks.com/resources.html>

#### 8. Raise awareness of the economic development process (and returns) among all stakeholder groups.

**Observation:** Much of the debate around which industries would be a good fit for New Hanover County centers around specific perspectives of what the community needs from specific groups rather than looking at the community’s well-being and economic health as a whole. Within some of the focus groups, and in much of the survey feedback, there seems to be a misunderstanding of what economic development seeks to accomplish and how it effects—and is affected by—decisions and actions around the community. Just as economic development efforts need to be sensitive to other community concerns such as quality of place, support for education, and infrastructure needs, the County and other economic development

actors must ensure that a rational case for change is made when setting an economic vision for the area and working to expand existing companies or recruit new ones.

**Recommendation:** The Swain Center for Business and Economic Services at UNC Wilmington should consider offering quarterly gatherings with national speakers related to economic development to better inform the economic development stakeholders and the public on the benefit and need for actions to increase the areas economic competitiveness. Such high-level discussion will bring a dialogue around the issues facing New Hanover County with a more solid understanding of the economic development implications. Potential topics could include how incentives and claw backs work to help shape an area’s economy, understanding of what types of industry targets are compatible for the region to enhance the county’s economic vitality, or the role of elected officials in the economic development of the area. Volunteer leadership of the economic development organizations and elected officials should be included so that they have the opportunity to better understand the nuances, trends, and activities related to economic development and how it impacts New Hanover County’s ability to compete for the type of economic activity that it desires and that will create more opportunity for its citizens.

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**Much of the debate around what industries would be a good fit for New Hanover County centers around specific perspectives of what the community needs from specific groups rather than looking at the community’s well-being and economic health as a whole.**

—Assets and Challenges Finding

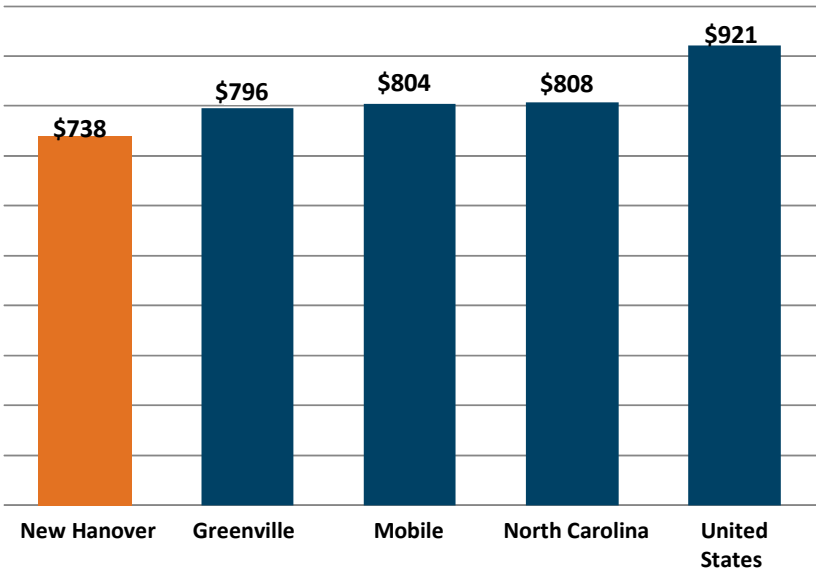
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**BUILD A BETTER NEW HANOVER COUNTY**  
**(PRODUCT IMPROVEMENT)**

As documented in the *Competitive Realities Report* (and replicated in Figure 11 below), New Hanover County is on a trajectory of continued low wages and per capita income. With weekly wages in New Hanover County below the nation, the state, and benchmark communities, it is imperative that New Hanover County diversify its economic base by attracting industry sectors that can generate wealth for its citizens and not rely predominantly on the service sector which is the largest provider of jobs in New Hanover County, but offers the lowest wages.

FIGURE 11: AVERAGE WEEKLY WAGE –2013 2Q



Source: US Bureau of Economic Analysis, Garner Economics

One way to alter this course is to make focused improvements in areas that will impact how efficiently existing and new companies in New Hanover County can operate, as well as fully leverage the talent that is in place. Economic development and marketing efforts are only successful if the area has a strong “product” to sell, including sites and buildings, transportation infrastructure, utility infrastructure, workforce development, leadership, and incentives.

**Strategy:**

**Strengthen the County’s assets and develop transformational, game-changing assets and initiatives in key areas that support the County’s desire to attract and grow more high-quality economic activities in the region.**

**Goal/Results:**

**New Hanover County transforms itself from a predominantly tourist and service economy to one that better leverages its economic fundamentals. In doing so, the County will build a business climate and quality of place that attracts the world’s most talented people and companies.**

# 1. Make the case for sustainable funding sources to improve the County's economic development infrastructure, and identify catalytic programs to use the monies effectively. (T)

**Observation:** Focus group participants and survey respondents widely commented that New Hanover County has a dire need for significant infrastructure improvements including roads and bridges, bike trails, green space, and water and sewer infrastructure to allow for quality economic growth and to strengthen the area's quality of place. However, these needs take resources or money, which the community must provide. In addition to the needs identified by New Hanover citizens to maintain or enhance what the County has, several needs exist to strengthen the County's economic development infrastructure and help attract capital investment. These require large investments or recurring funding but are necessary to differentiate New Hanover County as an innovative location. A sustainable funding source for New Hanover County would serve as a catalyst for those regional economic development initiatives that would otherwise be problematic to implement but would significantly improve the County's business climate

The State of Texas offers one precedent of the need and impact of such foresight. In 1979, the Texas Legislature decentralized economic development by giving cities and counties more control over their destinies. It allowed each entity to vote on a one-cent sales tax for tools and investments needed to better "sell" themselves as a location for business (e.g., deal closing funds, entrepreneurial development, venture capital or early stage investment funding, and product improvement such as infrastructure or increased air service). As a result, Texas is ranked by most in the industry as having a strong economic program and is the best practice example of sustainable funding for economic development on the local level.

**Recommendation:** Improvements to the County's economic development infrastructure will be costly. Hence, to ensure that

adequate and reliable funding is available, New Hanover County should work with the North Carolina Association of County Commissioners and its local legislative delegation to create a sustainable funding stream for economic development projects and needs that will benefit the region as a whole. Because the projects and initiatives will allow New Hanover to leapfrog its competition by making strategic improvements, this approach would have a profound positive impact on economic development the area.

According to the County, a \$.01 sales tax devoted to product development following the Texas model would generate nearly \$32 million on an annual basis (a half-cent would be \$16 million; still a significant funding mechanism). This type of initiative is transformational and would truly set the region apart from many communities in the United States. It would allow for bridge construction, site development, municipal water and sewer in more areas of the county, broadband connectivity in the rural areas, deal closing opportunities, and more. This single effort would do more to transform New Hanover County economically and help to diversify its economy than any other recommendation noted.

**Lead organizations:** New Hanover County, Chamber of Commerce, City of Wilmington.

**Best practice example:** Oklahoma City, OK; Charleston, SC; Topeka, KS; most Texas communities

<http://www.okc.gov/maps/index.html>

## 2. Establish an Airframe and Power plant (A&P)<sup>3</sup> certificate program.

**Observation:** The *Aircraft Assembly, Modification & Maintenance* target noted in Chapter 2 should be considered an aspirational target, in that, while many of the necessary requirements currently exist in the county, there would still need to be the establishment of an Airframe and/or Power plant (A&P) certificate program to produce a truly competitive target.

The target represents a relatively narrow set of industries under the *Aircraft Assembly, Modification & Maintenance* heading, which all share specialty-trained workers as their most significant optimal site factor. Current upheaval and expected growth in the aviation industry is opening new opportunities. Significant factors include: 1) cash-strapped airlines continuing to consolidate and outsource maintenance facilities to cut costs, 2) US-based domestic and international airlines are projected to purchase more aircraft and parts, 3) expansion of the global fleet of commercial aircraft is expected to reach nearly 30,000 units by 2021, thus increasing the global demand for commercial aircraft services, and 4) many foreign companies' inability to keep up with demand is creating opportunities for American firms.

**Recommendation:** CFCC should investigate the possibility of establishing an A&P certificate program located at the Wilmington International Airport (ILM) and in partnership with the Airport Authority.

<sup>3</sup> A&Ps, also referred to as Aircraft Maintenance Technicians (AMTs), inspect as well as perform, supervise, or conduct preventive maintenance and alterations of aircraft and aircraft systems. The position requires certification by the Federal Aviation Administration (FAA).

**Lead organizations:** Wilmington Airport Authority; Cape Fear Community College; New Hanover County Commission

**Best practice examples:** Guilford Technical Community College <http://www.gtcc.edu/programs-of-study/aviation-systems-technology/airframe-and-powerplant-certificate.aspx>;

Liberty University <http://www.liberty.edu/index.cfm?PID=17773>

## 3. Develop hangar facilities to attract MROs and aircraft assembly operations.



**Observation:** In conjunction with recommendation #2 above, and with the assumption that CFCC would begin an A&P certificate school, it would be incumbent upon the Airport Authority, and part of their long-term strategy, to

develop hangar space at ILM so as to attract airline maintenance and repair operations and aircraft assembly facilities to ILM.

**Recommendation:** ILM should develop hangar space large enough to attract an MRO or assembly operation based on the type of aircraft that may have the most opportunity for work in Wilmington (larger is better).

**Lead organization:** Wilmington Airport Authority; CFCC; WBD, Inc.

**Best practice examples:** Brookley Field – Mobile, AL; Cecil Field – Jacksonville, FL

#### 4. Advocate for the creation of a pharmacy school in the region.

**Observation:** New Hanover County is well positioned to take advantage of expanding opportunities in *Life/Marine Sciences Research & Development* as noted in Chapter 2. While diverse in products made and markets served, the target group shares a heavy reliance on workers in the *Life, Physical & Social Science* occupational group, composing more than 12 percent of its total workforce as compared to just 0.8 percent of the nation's employed workforce. This is a strong viable target for NHC and, by adding more assets to this target, it will offer an even stronger rationale on why this sector can grow and flourish in NHC. Currently there are only three pharmacy schools in North Carolina

<http://www.ncbop.org/schoolsofpharmacy.htm>.

**Recommendation:** NHC, WBD, the City of Wilmington, and the Wilmington Chamber should advocate for the creation of a pharmacy school (either from a public or private educational institution) in the area to complement the suggested industry target of *Life/Marine Sciences Research & Development*. The development of a degreed pharmacy school will serve as part of the region's attraction for companies engaged in pharmacology.

**Lead organization:** NHC, WBD, the City of Wilmington, and the Wilmington Chamber

#### 5. Develop a real estate portfolio of additional sites for industrial, commercial, and office development. (T)

**Observation:** A significant detriment to New Hanover's ability to attract and, perhaps, retain industrial investment is its lack of fully served industrial sites. A site is defined as a parcel of property for sale

or lease with a published price and with the entire necessary infrastructure in place, with the size and capacities that would attract the appropriate investment. Most of the properties designated as either I-1 or I-2 in NHC do not have water and/or sewer infrastructure in place, making it nothing more than raw, unusable land. Most companies today would require being connected to a municipal water and wastewater system. Only the availability of office space and office sites is considered a neutral in NHC, as noted in the previously published *Competitive Realities Report*, with WBD listing 150,000 sq. ft. of class A or B space on its website.

At the request of Garner Economics, WBD engaged Strategic Economic Development Services of Wilmington, NC, to conduct an analysis of the current industrial zoned parcels within NHC and the City of Wilmington. In summary, limited or non-existent inventory exists outside of the City of Wilmington since water and sewer infrastructure is mostly unavailable. Inside the City of Wilmington, there are greater opportunities for industrial development (640 acres+/-) and 430 acres +/- for future office development. Therefore, there is little to no opportunity for meaningful development outside of the City since water and sewer infrastructure is limited at best, and there is normal potential for quality development inside the City since the sites identified by WBD and its consultant are served by the appropriate infrastructure.

**Recommendation:** NHC should work with WBD and the Cape Fear Public Utility Authority (CFPUA) to determine which areas of the County offer the highest and best use for a development strategy based on I-1 and I-2 designations and then develop a short- and long-term master plan to extend water and sewer infrastructure.

**Lead organizations:** NHC; WBD; CFPUA

## 6. “ReBuild” New Hanover. (T)

**Observation:** Feedback from the focus groups and the electronic survey indicated that parts of NHC are perceived as suffering from aging, limited, or no infrastructure and blight. Strengthening the physical infrastructure in the unincorporated County so that it meets the operating requirements of both business and residents will not only help in attracting new companies, but also will help existing companies better connect to their markets, customers, and employees.

**Recommendation:** NHC should establish a dedicated, pay-as-you-go fund, or use funding from the sustainable funding source in recommendation #1 above, to develop water and sewer infrastructure in areas targeted as future development by the County’s comprehensive plan. Then, it should work with the applicable partners, such as Cape Fear Public Utility Authority, to ensure that the County’s physical product supports its economic development goals and that economic development criteria are used to inform the capital budgeting process and help select which project investments are chosen. Similarly, New Hanover County should work with the State Department of Transportation to highlight and raise the visibility of necessary transportation infrastructure maintenance and expansion.

**Best practice example:** The ReBuild Houston Initiative is the City of Houston’s plan to rebuild the City’s drainage and street infrastructure to improve the quality of life and mobility for residents of the City through drainage and street improvements and maintenance.

Houston has established a dedicated pay-as-you-go fund to help maintain and improve the City’s drainage and street infrastructure and to plan upgrades to meet future needs as the City grows: <http://www.rebuildhouston.org/>

## 7. Provide the public free high-speed Internet access throughout New Hanover County.

**Observation:** Access to broadband infrastructure is critical to the development of a live/work/play environment and is an enabling platform for rapidly growing business sectors such as e-commerce, social networking, online education, health IT systems, and delivery of public services. High-speed connections are increasingly becoming a fundamental infrastructure element rather than a luxury for an area. The City of Wilmington currently has free Wi-Fi in parts of downtown branded as City Port Wi-Fi. This is a positive for mobile entrepreneurs and visitors to the City.

**Recommendation:** New Hanover County should take action to build a free, high-speed wireless node in populated areas of the County. As with the City of Wilmington, usage is for 30-minute intervals that require a login and, as such, would not normally compete with private sector businesses that provide wireless for a fee basis. But, this effort will show residents, visitors, and entrepreneurs that the County has embraced technology and supports a mobile workforce. By working with appropriate vendors to create areas that have access to free, high-speed wireless Internet connections, the County will not only create an amenity that will draw activity to the area but will also provide an added utility and asset to some of the economically disadvantaged populations. The Wi-Fi zone could be publicly sponsored or be supported by the provider.

**Lead organization for implementation:** New Hanover County working with private-sector providers.

**Best practice examples:**

- Mineral County, NV - <http://mineralcountynevada.com/>
- Allegany County, MD - <http://thejournal.com/articles/2008/11/03/allegany-county-deploys-wifi-districtwide.aspx>
- Alexandria, VA - <http://wirelessalexandria.com/>
- Amherst, MA - <http://amherstma.gov/index.aspx?NID=805>
- Anderson, IN - <http://www.cityofanderson.com/wifi.aspx>
- Ponca City, OK - <http://www.poncacityok.gov/index.aspx?NID=417>
- Mountain View, CA (in conjunction with Google) - [http://www.mountainview.gov/services/learn\\_about\\_our\\_city/free\\_wifi.asp](http://www.mountainview.gov/services/learn_about_our_city/free_wifi.asp).

## 8. Advocate for the continuation of incentives for the film industry.

**Observation:** Film production in New Hanover County has a significant economic impact, both directly and indirectly. Film production has been an integral part of the New Hanover County economy since the early 1980s and has become a cluster of activity in the area. Data provided by the Wilmington Regional Film Commission completed by North Carolina State University shows that the film industry and its multipliers pay in excess of \$10,000,000 in taxes to NHC annually. Of that amount, \$3.7 million is sales tax revenue to New Hanover County.

The North Carolina Legislature is considering not extending the tax credit and other related incentives for the film industry in the state. As this is occurring, Georgia and Louisiana are attracting more film

production shoots and movie studios because of the positive business climate their respective legislatures are providing to attract this industry sector. Without the extension of the tax credit, North Carolina will likely be unable to compete with neighboring states in attracting such activities.

**Recommendation:** Similar to the above efforts to create a more conducive business climate for the target industries, New Hanover County should continue to press for the extension of the policy that has helped grow the area's film industry. The current efforts by New Hanover County, the City of Wilmington, The Wilmington Regional Film Commission, the Wilmington Chamber of Commerce, and the many like-minded group(s) that advocate for the continuation of the current tax credits and incentives should continue to be supported.

## 9. Facilitate regional efforts to grow the Talent Pipeline. (T)

**Observation:** Tomorrow's companies will demand different skill sets. The next generation of New Hanover's workforce will need to be better educated, adaptable, and agile to meet growing global competition and serve the needs of the different types of businesses the county and region hopes to attract. While New Hanover County has the fundamentals in place to begin to attract the target industries, it must also be able to produce the types of workers that will help these businesses thrive.

Data and feedback from the focus groups and electronic survey suggests that New Hanover's workforce often cannot meet business needs. Specifically, focus group participants representing employers of all sizes were adamant about the deficiencies in the skilled and technical workforce. Also, in the opinion of many of the employers, there may be a disconnect between what the end-user (the customer) needs and what is being taught in the schools. A caveat to this, however, is the positive comments from the focus group participants regarding the quality and value of Cape Fear Community

College and UNCW and their efforts in training and educating students to enter the workforce with skills needed by area employers. New Hanover County Schools do offer programs related to Early College, which is a positive to employers and students alike, and with career pathways, which is also a tool to build the talent pipeline. To reinforce the importance of both the Early College and career pathways initiatives for the school board, administration, and business community, they are noted below.

**Recommendations:**

- a. **Continue to support the utilization of career academies or career pathways in middle and high school with a curriculum that meets the needs of businesses in the identified clusters that help sustain and grow the talent pipeline.**
- b. **Continue to support and engage New Hanover County Schools, UNCW, and CFCC so that each high school student has the ability and option to graduate from high school with an associate arts degree from CFCC or two years of credit hours from a four-year university (UNCW).**
- c. **Support career awareness of cluster occupations through internships.**

In our focus groups with employers, a concern they identified was a lack of awareness of existing firms and specific job openings within the region. The various employment organizations need to feature these companies and employment opportunities with students, graduates, and educators.

A best practice example is the Intern to Earn program sponsored by HIRE, an alliance of colleges and universities in the Louisville, KY region. It is a program for identifying internship opportunities. The program works to improve the talent pool of workers and young talent in the Louisville area by recognizing that interns tend to return to the communities in which they interned, if they leave the area in the first place.

The program is sponsored by the Greater Louisville Chamber of Commerce. <http://www.greaterlouisville.com/InternToEarn/>

- d. **Improve graduation rates by promoting entrepreneurship among the County's youth.**

Most new jobs in the United States are created by entrepreneurial and innovative firms of all sizes. Several cities have engaged youth in entrepreneurship to build a pipeline of future companies and to excite and empower disengaged, low-income students to increase their chance of graduation by focusing talents and energies on a specific goal. NHC could replicate such a program to serve two of its economic development needs by working with the County Schools to offer entrepreneurship curriculum as a daily, credited class in high schools. The County's proposed economic development office could serve as a liaison between the schools and entrepreneurial talent in the community to supplement the current curricula with the real-life experience of running their own small businesses. Such experiential learning will reinforce critical academic skills and motivate at-risk students to stay in school.



**Lead organization for implementation:** NHC in cooperation with New Hanover County Schools and local businesses.

**Best practice examples:** Lynchburg, VA engages young people through **Grow One**, a practical, hands-on experience in starting and running a business. Additionally, the **Young Entrepreneurs Academy, or YEA!**, is an educational program that takes students in grades 6-12 through the process of starting and running real businesses over the course of a full academic year.

The **BUILD In Business to Learn** mission is to use entrepreneurship to excite and propel disengaged, low-income students through high school to college success. BUILD partners with schools to provide entrepreneurship curricula to supplement school programs for at-risk students based on the core values of education, financial responsibility, and building self-confidence.

<http://build.org/home>

## TELLING THE STORY (PRODUCT MARKETING)

In being more proactive, the County has the opportunity to tell its story more effectively and to be a better spokesperson for the economic dynamism of the area. Site location advisors and companies within the targeted industries and clusters are the primary audience for such efforts.

### Strategy:

**Tell New Hanover County's economic development story more effectively to a more targeted audience of potential companies and investors.**

### Goal/Results:

**The County is better able to identify and attract the types of companies that will leverage its assets and increase the quantity and quality of economic opportunities for its citizens.**

- 1. Support the optimal targets by establishing industry working groups for each.**

**Observation:** Launching and pursuing the industry targets identified in this report will be an important element in building a sustainable economic growth strategy for NHC. Often the best “salespeople” are those who have already chosen NHC as their business location.

**Recommendation:** While elements of the optimal target industries currently exist, the County (in partnership with Wilmington Business Development) should create working groups to garner input from existing local business leaders within each of the clusters and industry targets identified in this strategy (*Life/Marine Sciences Research & Development; High Value Office Operations; Precision Manufacturing; Aircraft Assembly, Modification & Maintenance*). The groups would be charged with helping the County craft specific messages and

marketing activities related to the clusters and the related targeted industries that are most likely to resonate with peers and attract other companies within the clusters to the region.

## 2. Execute a process for lead generation.

**Observation:** Historically, WBD has not proactively pursued targeted industries through an aggressive marketing campaign, nor has it institutionalized a lead generation program (primarily because of budget limitations). Such a program would allow WBD to effectively identify and prioritize prospects and would provide the industry expertise to qualify such prospects. Moreover, such a program would help other economic development partners—such as the County—understand and better support WBD’s attraction efforts.

**Recommendation:** To offer the region the best opportunities for investment, WBD should engage a firm that will target the universe of companies within the industry targets and sub-targets noted in this report that will offer the region the best opportunity for investment within each sector.

The targeting process is scientific in nature and evaluates key company performance metrics including sales, employment, growth, number of locations, and other relevant factors. Company activities and events that indicate expansion or consolidation—such as mergers and acquisitions, executive changes, technology development, and overall industry trends—are used to identify the target companies that have the means and indicative corporate behavior to consider an expansion opportunity in the short- and medium-term. Engaging a firm with such capacity will better enable WBD to conduct its marketing efforts in a very focused and direct manner.

**Cost:** \$35,000

## 3. Develop familiarization (FAM) events for consultants and companies.

**Observation:** Site location consultants typically handle 30% of all location advisory work in the United States (which means companies do 70% of their investment analyses internally). Engaging these companies and consultants is a cost-effective way to introduce a region to corporate relocation decision-makers. While a community can present itself and its assets well on paper (and on its website), the best way to introduce a region to location advisors and companies is to allow them to experience the region—and all it has to offer—firsthand.



*Wrightsville Beach*

**Recommendation:** Once a year, WBD and the proposed micro marketing alliance should contract with the Site Selectors Guild, an association of the world’s foremost professional site selection consultants, to conduct a 2-day tour of the region. Such “familiarization” or “FAM” events allow experts to discover the region firsthand and/or be briefed on updates and enhancements to the region’s business climate since their last visit. Successful FAM events are predicated on having some sort of draw that will attract high-quality consultants and that reinforces the unique brand of the region and its value as a business location.

Every other year, contact company executives within the targeted companies and conduct a similar FAM event with companies directly.

<http://siteselectorsguild.com/customfamtours.php>.

**Best practice examples:** Des Moines, IA; Minneapolis, MN; Austin, TX

**Cost:** \$40-65,000 each year, depending on the number of consultants or interactions desired.

**4. Create a cadre of regional ambassadors to extend the region's brand.**

**Observation:** The Cape Fear region is rich with business executives and affluent retirees who travel the globe for their respective companies, who serve on corporate boards, or are enjoying retirement by living in the region but still traveling for personal fulfillment. What better way to engage these current and retired executives than for the region to make them ambassadors of the area and encourage them to promote the area in their travels to other

businesses? Such third-party testimonials are an effective way to promote the area to their peers internationally.

**Recommendation:** WBD should develop an ambassadors program to train willing business leaders in assisting the organization in these efforts. WBD staff would provide talking points and collateral to the ambassadors to help them tout the region's business attributes.

**Best practice example:** The Greater Richmond Partnership

<http://www.grpva.com/news-and-media/details/rva-agents-mission-possible>

## CHAPTER 4: CONCLUSION



Many in New Hanover County recognize that more must be done if the area wants to diversify its economy, create more economic opportunities for its citizens, and positively impact the economic trajectory of the region. While the County has many assets upon which to build, it also faces several challenges that must be addressed if it is to compete with surrounding areas. The County's location, the existence of the port and ILM, its higher education assets, and existing industry clusters are solid foundations upon which it can build. However, the area must find consensus around the type of economy it wants to build and be more proactive in nurturing and attracting high-quality companies that will provide opportunities for its growing population.

Moreover, the County must take the lead to undo or mitigate policies, such as the Special Use Permit, that currently inhibit greater levels of investment in New Hanover County. Concurrent with this, the County should facilitate efforts to better market the region as a whole and to consolidate government services and create realistic incentive packages to improve the area's business climate. In addition to the steps to strengthen the County's economic foundations, it is also necessary to take these bold steps to transform New Hanover County given the competition it faces from other areas and the increasing mobility of talent and high-quality companies.

Through *Pathways to Prosperity*, County leaders can simultaneously take on game-changing initiatives to reinvent the County's core strengths while making long-term organizational and structural

investments to ensure that the area has a prosperous future. By taking a leadership position and building a future economic vision for New Hanover County, the County leadership can take bold yet strategic steps that will transform New Hanover County and Wilmington into a place that attracts quality talent and companies.

In order to create such an advantage, however, the County will need to do things differently and with courage. It will need to take the lead in proposing and changing tools that will help the County achieve its economic development mission and make critical investments to mitigate current challenges and weaknesses.

Similarly, a more structured approach to economic development is needed so that the correct level of personnel and attention is paid to the County's economic growth.

As the County works to focus its marketing and attraction efforts and works with other economic development partners to make strategic changes to transform the area's business climate and the spaces and places where activity will occur, New Hanover County will become a more competitive place for businesses.

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Garner Economics would like to thank the Strategic Planning Steering Committee led by Gary Miller at UNCW and Ted Spring at CFCC; Chris Coudriet, NHC county manager; and the county staff for their help and assistance during this process. Their compilation of data and past studies as well as their openness and willingness to explore various opportunities to strengthen operations have contributed to the richness and rigor of this report.

## RECOMMENDATIONS SUMMARY

Strategy	Goal/Results	Actions
<p><b>Execute Effectively:</b> Build a focused economic development service delivery mechanism for existing and potential businesses in the County and collaborate with other municipal economic development entities to work more seamlessly and present a unified brand to external clients.</p>	<p>The County is better able to attract the types of industries and talent that will make the New Hanover County/Wilmington area competitive. In doing so, the County will serve as a deal flow catalyst that delivers high-value business services to its constituents.</p>	<ol style="list-style-type: none"> <li>1. Create a County Department of Economic and Community Development and hire a Director.</li> <li>2. Create a three-county micro marketing alliance of New Hanover, Brunswick, and Pender Counties.</li> <li>3. Consolidate services and explore the feasibility of consolidated government in New Hanover County. (T)</li> <li>4. Advocate for and develop a realistic and sustainable incentive policy for New Hanover County (and City).</li> <li>5. Eliminate the Special Use Permit from the County's permitting process or modify the SUP Table of Permitted Uses.</li> <li>6. Recruit and help train business leaders to serve in elected office and to serve on appointed boards and commissions. (T)</li> <li>7. Better Support Small and New Businesses.             <ol style="list-style-type: none"> <li>a. Increase communications with small businesses.</li> <li>b. Identify existing resources that will help small and new businesses grow.</li> </ol> </li> <li>8. Raise awareness of the economic development process (and returns) among all stakeholder groups.</li> </ol>

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<b>Build a Better Product:</b> Strengthen the County's assets and develop transformational, game-changing assets and initiatives in key areas that support the County's desire to attract and grow more high-quality economic activities in the region.	New Hanover County transforms itself from a predominantly tourist and service economy to one that better leverages its economic fundamentals. In doing so, the County will build a business climate and quality of place that attracts the world's most talented people and companies.	<ol style="list-style-type: none"> <li>1. Make the case for sustainable funding sources to improve the County's economic development infrastructure and identify catalytic programs to use the monies effectively. (T)</li> <li>2. Establish an Airframe and Power plant (A&amp;P) certificate program at Cape Fear Community College.</li> <li>3. Develop hangar facilities at ILM to attract MROs and aircraft assembly operations.</li> <li>4. Advocate for the creation of a pharmacy school in the region.</li> <li>5. Develop a real estate portfolio of additional sites for industrial, commercial, and office development. (T)</li> <li>6. "ReBuild" New Hanover. (T)</li> <li>7. Provide the public free high-speed Internet access throughout New Hanover County.</li> <li>8. Advocate for the continuation of incentives for the film industry.</li> <li>9. Facilitate regional efforts to grow the Talent Pipeline. (T) <ol style="list-style-type: none"> <li>a. Continue to support the utilization of career academies or career pathways in middle and high school with a curriculum that meets the needs of businesses in the identified clusters that help sustain and grow the talent pipeline.</li> <li>b. Continue to support and engage New Hanover County Schools, UNCW, and CFCC so that each high school student has the ability and option to graduate from high school with an associate arts degree from CFCC or two years of credit hours from a four-year university (UNCW).</li> <li>c. Support career awareness of cluster occupations through internships.</li> <li>d. Improve graduation rates by promoting entrepreneurship among the County's youth.</li> </ol> </li> </ol>
<b>Tell the Story:</b> Tell New Hanover County's economic development story more effectively to a more targeted audience of potential companies and investors.	The County is better able to identify and attract the types of companies that will leverage its assets and increase the quantity and quality of economic opportunities for its citizens.	<ol style="list-style-type: none"> <li>1. Support the optimal targets by establishing industry working groups for each.</li> <li>2. Execute a process for lead generation.</li> <li>3. Develop familiarization (FAM) events for consultants and companies.</li> <li>4. Create a cadre of regional ambassadors to extend the region's brand.</li> </ol>